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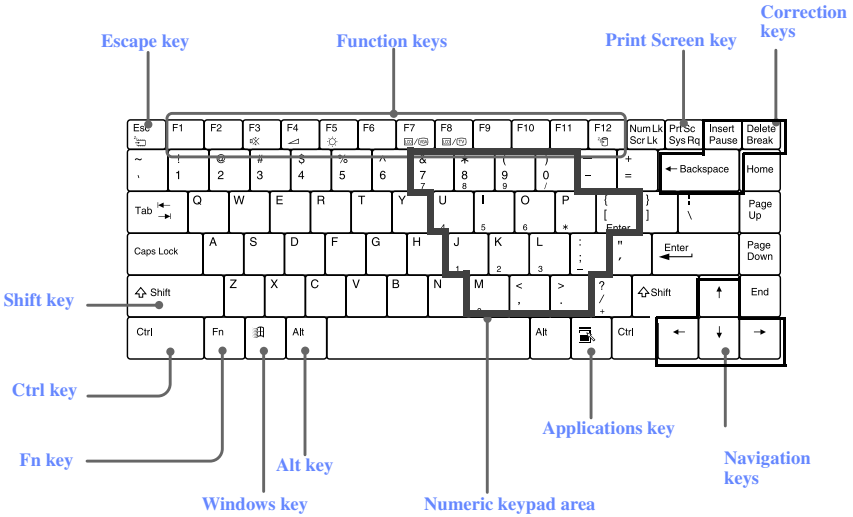
Using Your VAIO® Notebook

This section describes how to use your keyboard, touchpad, floppy disk drive, and optical drive. You will also find information on how to connect your notebook to another computer or network.

Using the Keyboard

Your keyboard is very similar to a typewriter's, but the keyboard has additional keys that perform specific computer-related tasks.

Keyboard



Key	Description
Numeric keypad area	Contains the keys found on a typical calculator. Use the numeric keypad area to type numbers or to perform mathematical calculations such as addition and subtraction. Note that you must press the Num Lock key to activate the numeric keypad. (When you do so, the Num Lock light will be on.)
Navigation keys	Several keys are devoted to moving the cursor on the screen.
Correction keys	The Insert, Back Space, and Delete keys enable you to make corrections in your documents.
Function keys	The twelve function keys along the top of the keyboard are used to perform designated tasks. For example, in many applications, F1 is the Help key. The task associated with each function key may vary from one application to the next.
Escape key	The Esc (Escape) key is used to cancel commands.

Key	Description
Print Screen key	The Print Screen key takes an electronic snapshot of the screen and places it in the Windows Clipboard. You can then paste the screen shot into a document and print it.
Operator keys (Shift, Ctrl, Alt keys)	Several keys are always used with at least one other key: Ctrl, Alt, and Shift. When held down with another key, the Ctrl (Control) and Alt (Alternate) keys offer another way to give commands. For example, in many applications, instead of choosing the Save command from a menu, you can hold down Ctrl and press S (referred to as Ctrl+S). The Shift key operates the same way as on a typewriter; it is used to produce capital letters or special symbols, such as @ and $.
Windows key	The key with the Windows logo displays the Windows Start menu; it is the equivalent of clicking the Start button on the taskbar. See "Combinations and Functions with the Windows Key" for more information.
Fn key	The Fn key is used in combination with other keys to issue commands. See "Combinations and Functions with the Fn Key" for more information.
Applications key	The Applications key displays a shortcut menu of context-sensitive choices. Pressing this key is the equivalent of clicking the right mouse button.

Combinations and Functions with the Windows Key

Combination	Function
+ F1	Displays Windows Help.
+ Tab	Switches the selected button on the taskbar.
+ D	Displays the Desktop.
+ E	Displays Windows Explorer.
+ F	Displays the Windows Find: All Files window to find a file or folder. This is the equivalent of selecting Find and then Files or Folders from the Start menu.
+ Ctrl + F	Displays the Windows Find: Computer window where you can locate other computers. This is the equivalent of selecting Find and then Computer from the Start menu.
+ M	Minimizes all displayed windows.

Combination	Function
Shift + ⊞ + M	Returns all minimized windows to their previous size.
⊞ + R	Displays the Run window. This is the equivalent of selecting Run from the Start menu.
Fn + ⊞ + Insert	Displays the Properties window. This is the equivalent of double-clicking the System icon in the Control Panel.

Indicators

Indicator	Function
Power ⏻	Light is green when the power to the notebook is turned on, flashes amber in Standby mode, and turns off when the notebook is in Hibernate mode or powered off.
Battery 1 1	Indicates the status of the battery inserted in the battery bay on the left side of the notebook.
Battery 2 2	Indicates the status of the battery inserted in the multipurpose drive bay on the right side of the notebook.
Hard disk	Lights when data is being read from or written to the hard drive. Do not enter Standby mode or turn off the notebook when this indicator light is on.

Indicator Lights

Light	On	Off
Num Lock	The number keys in the numeric keypad are active.	The alphanumeric character keys in the keypad area are active.
Caps Lock	The letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on.	Letters appear in lower case as you type (unless you hold down the Shift key).
Scroll Lock	The screen scrolls differently. (Exactly how it scrolls depends on the specific application. It has no effect in many applications.)	Information moves across the display normally.

Combinations and Functions with the Fn Key

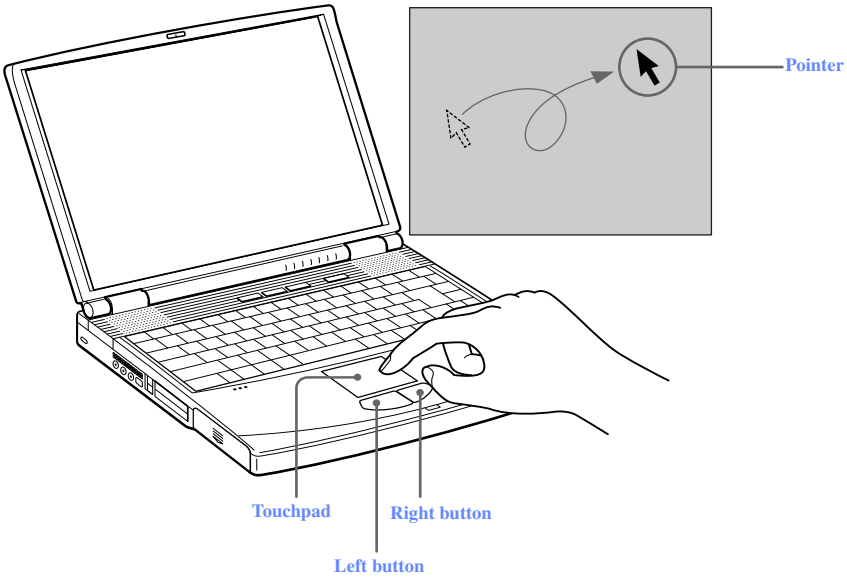
Combinations/ Feature	Function
Fn+ (ESC) Standby	Puts the system into Standby mode, a power management state. To return the system to the active state, press any key or press the power button on your notebook.
Fn+ (F3) Mute On/Off	Toggles the built-in speaker off and on.
Fn+ (F4) Speaker volume	Adjusts the built-in speaker volume. To increase volume, press Fn+F4, then ↑ or →. To decrease volume, press Fn+F4, then ↓ or ←.
Fn+ (F5) Brightness control	Adjusts the brightness of the LCD. To increase light intensity, press Fn+F5 and then ↑ or →. To decrease light intensity, press Fn+F5 and then ↓ or ←.
Fn+ LCD/ VGA (F7) Switch to the external monitor/ LCD	Toggles through the LCD, external display (connected to the Monitor jack) and both LCD and external display. Only LCD → LCD and external display Only external display ←
Fn+ LCD only/ TV (F8) Control TV out	Toggles between LCD-only and dual LCD/TV display modes. Only LCD → LCD and external display Only external display ← Connect the cable before you turn on the notebook, otherwise Fn + F8 will not work.
Fn+ (F12) Hibernate	Provides for the lowest level of power consumption. When you execute this command, the state of the system and state of the peripheral devices are written to the hard disk and the system power is turned off. To return the system to its original state, use the power button to turn on power.
Fn+D Video standby	Turns off the LCD to save power. To turn the LCD back on, press any key (Windows Me™ only).
Fn+ F	Display control. Minimizes and maximizes the LCD screen. If the default display resolution is reduced, this function maximizes the display resolution to fit the screen size. Maximizing the display screen enables you to view the display at a greater resolution.

✍ Some functions are not available until Windows launches.

Using the Touchpad

The keyboard contains a cursor-pointing device called a touchpad. You can point to, select, drag, and scroll objects on the screen using the built-in touchpad.

Touchpad



Action	Description
Point	Slide one finger on the touchpad to place the pointer on an item or object.
Click	Press the left button once.
Double-click	Press the left button twice.

Action	Description
Right-click	Press the right button once. In many applications, this action displays a shortcut menu of context-sensitive choices.
Drag	Slide one finger while pressing the left button.
Scroll	Move your finger along the right edge of the touchpad to scroll vertically. Move your finger along the bottom to scroll horizontally. (The scroll function is available only with applications that support a touchpad scroll feature.)

✍ See Mouse Properties for information on touchpad features, such as clicking both buttons simultaneously, adjusting touchpad speed, and Easy Launcher functions. To access Mouse Properties, click the Start button, point to Settings, point to Control Panel, and then click the Mouse icon in the Control Panel.

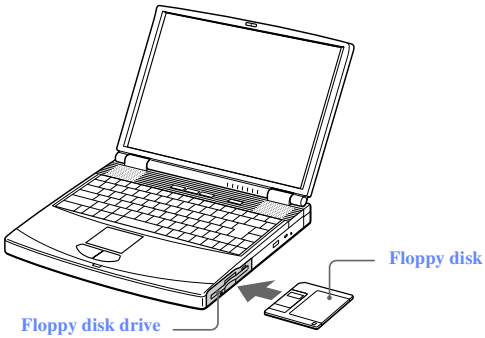
Using the Floppy Disk Drive

Your notebook comes with the floppy disk drive in the multipurpose bay.

To insert a floppy disk

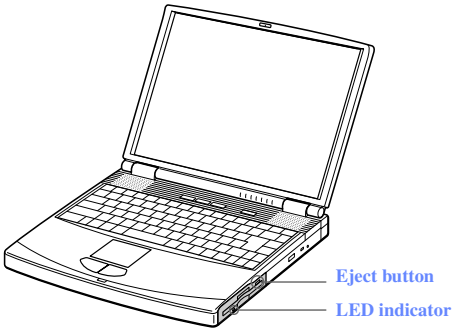
1 Hold the floppy disk with the label side facing up.

2 Gently push the floppy disk into the drive until it clicks into place.



To remove a floppy disk

❑ When you finish using the floppy disk, wait until the LED indicator turns off, then press the Eject button to remove the floppy disk.



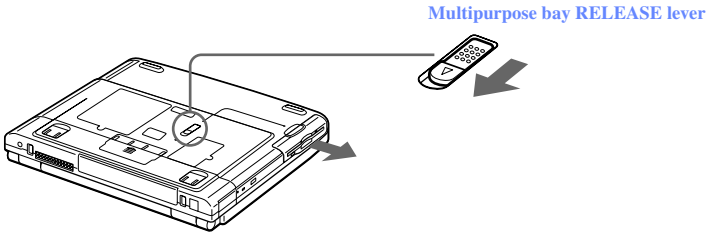
✍ Do not push the eject button when the LED indicator is turned on. Otherwise, data may be lost.

To remove the floppy disk drive

1 Turn off the notebook.

2 There is a RELEASE lever on the bottom of the notebook. Slide this lever in the direction of the arrow.

Multipurpose bay release lever



3 Slide the floppy disk drive out of the multipurpose bay.

4 Insert the weight saver. See “Using the Weight Saver” for more information.

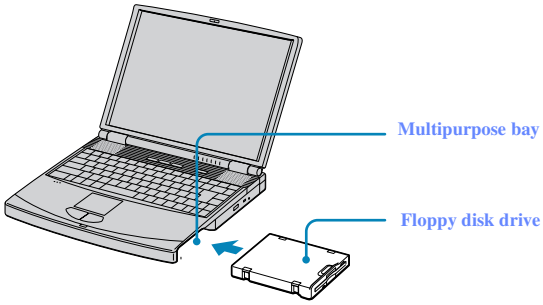
To reinsert the floppy disk drive

1 Turn off the notebook.

2 If another device is in the multipurpose bay, remove the device. See “To remove the second battery pack” for more information.

3 Insert the floppy disk drive into the multipurpose bay with the VAIO label facing up. Continue pushing the drive into the bay until the RELEASE lever locks into place.

Inserting the floppy disk drive



Using the Optical Drive

Your notebook comes with an optical drive, either a CD-RW/DVD Combo Drive or DVD-ROM drive, depending on the model you purchased.

To insert a disc

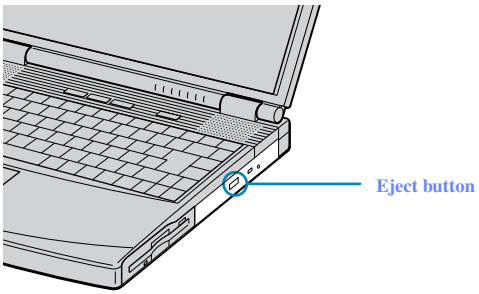
1 Turn on the notebook.

✍ When the notebook is in Standby or Hibernate mode, you cannot insert a disc. See “Controlling Power Management” for more information on Standby and Hibernate modes.

2 Press the Eject button to open the optical drive.

The tray slides out.

Ejecting the tray

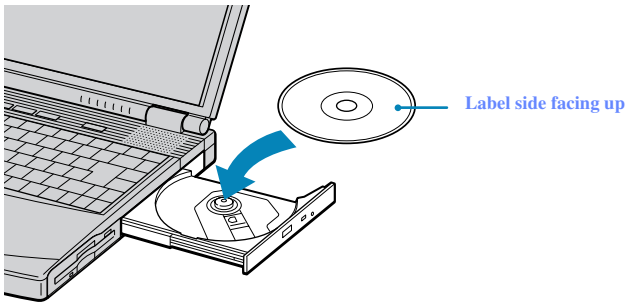


3 Place an optical disc on the tray with the label side facing up. For DVDs that can be played on both sides, the side of the disc facing up is the side that plays.

Do not use adhesive labels to identify your discs. Adhesive labels may come off while the disc is in use in the optical drive(s), and may cause damage to the drive.

4 Push the disc onto the hub until the disc clicks securely into place.

Inserting an optical disc



5 Close the tray by pushing it gently.

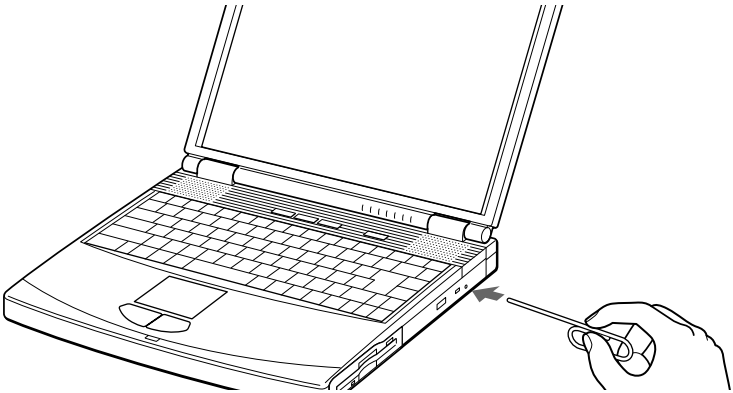
✍ Be sure to seat the disc firmly over the hub fingers. If you do not seat the disc firmly, you could damage your optical drive and you may not be able to open the tray.

When you finish using a disc, wait until the LED indicator turns off, then press the Eject button to remove the disc.

When the notebook is in power saving modes, you cannot remove a disc. See "Controlling Power Management" for more information about power saving modes.

If the disc does not come out when you press the Eject button, turn off the notebook and insert a thin, pointed object (such as a paper clip) into the manual eject hole.

Manual eject hole



Playing a DVD

To achieve optimum performance when playing DVDs, it is recommended that your notebook not be connected to the port replicator while playing DVD movies or using DVD applications. Close any open applications before playing a DVD movie.

✍ When playing DVD movies on battery power, set the power management profile to DVD. With other profiles, the movies are choppy. As an alternative, you can set the power management profile to Automatic Profile Selection, which will cause the DVD profile to be selected automatically whenever you insert a DVD. See "Controlling Power Management" for information on how to set the power management profile.

- You can play DVDs using the optical drive and the WinDVD® software. See the help file that comes with the WinDVD software for details.

Some discs recorded at 20 or 24 bits may produce noise while playing. If you have audio devices connected, this may cause damage to your hearing and the speakers. Reduce the volume before playing such discs.

You cannot switch between LCD and TV if you press Fn+F8 when a DVD is inserted in the optical drive.

If you connect a TV, see "Selecting the Display Mode" for instructions.

When a TV is connected to a notebook that is set to factory settings, a part of the video screen will not appear. To view the entire screen, adjust the display resolution to 640 x 480 and see "Selecting the Display Mode" for more information.

If you set the display resolution higher than the default setting (1280 x 1024, 24 bits), the DVD video may not play properly.

(For models with SXGA+ panels) To view the DVD video clearly, set the display resolution to 1024 x 768 dots (16 bits).

Do not switch the power saving modes while you are playing the DVD disc.

Do not switch between LCD and the external display while you are playing the DVD video.

Change the setting to disable the screen saver and the virus checker (if it is active).

Do not use memory-resident utility software to speed up disc access. This may cause the notebook to malfunction.

Notes on CD and DVD media

- Do not drop or bend the disc.
- Do not touch the surface of the disc. Fingerprints and dust on the surface of a disc may cause reading errors. Proper care of the disc is essential to maintain its reliability. Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray, as they may cause damage to the disc.
- For normal cleaning, hold the disc by its edge and use a soft cloth to wipe the surface from the center out.

- If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry soft cloth.

Writing data to CD-RW/CD-R media (For models with a CD-RW/DVD Combo Drive)

You can use Easy CD Creator™ software to write data to a CD-R or CD-RW. To use Easy CD Creator, see the online help manual that comes with the software.

✍ For optimal writing speed, deactivate the screen saver and exit anti-virus software before writing data to a disc.

For best results, use CD-Rs that are compatible with 4x speed.

Do not put your notebook into power saving mode while using Easy CD Creator.

⚠ **Do not touch the surface of the disc. Fingerprints and dust on the surface of a disc may cause writing errors.**

Do not strike or shake the notebook while writing data to a disc.

Memory-resident disc utilities, such as the screen saver and virus checker, may cause unstable operation or data loss. Deactivate these utilities before writing data to a disc.

Always use the AC adapter as the power source for your notebook when you are writing data to a CD-R or CD-RW. Using battery power may result in data transfer failure.

Using PC Cards

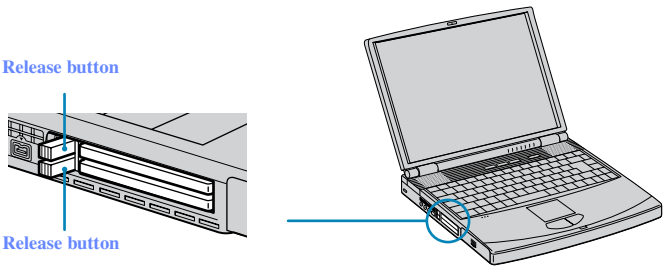
Your notebook includes two PC Card slots. PC Cards enable you to connect portable external devices such as another hard disk drive, or to connect a network.

✍ The PC Card slots can accommodate two Type I/II PC Cards, or one Type III PC Card. These slots are compatible with CardBus. Use the lower slot for Type III PC Cards. You do not need to shut down your notebook before inserting or removing a PC Card.

To insert a PC Card

1 Push the Release button. The Release button pops out.

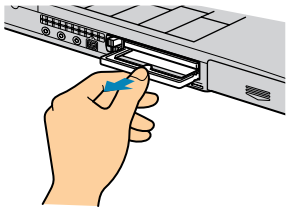
PC Card release button



2 Press the Release button a second time. The PC Card slot protector pops out.

When you use a Type III PC Card, you need to remove both the top and bottom PC Card slot protectors.

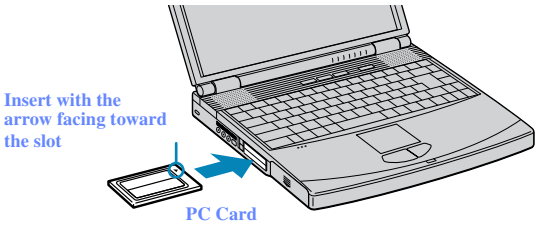
PC Card slot protector



3 Insert the PC Card into the PC Card slot. Make sure the front label of the PC Card is facing up.

4 Push the PC Card slot gently into the port. The PC Card is automatically detected by your system. The Unplug or Eject Hardware icon appears in the taskbar.

Inserting a PC Card



Do not force a PC Card into the slot as this may damage the connector pins.

Touching the head of the PC Card will not cause damage to the connector pins, but damage can occur if the head of the PC Card is sticking out of the notebook while the unit is being transported.

To remove a PC Card

If your notebook is turned off, you do not have to follow these instructions.

1 Double-click in the taskbar. The "Unplug or Eject Hardware" dialog box appears.

2 Select the hardware device you wish to remove.

3 Click Stop. In the "Stop a Hardware device" dialog box, confirm that the device can be safely removed from the system.

4 Click OK. The message, "PC Card can now be safely removed from the system" appears.

5 Click OK again and click Close.

6 Push the Release button. The Release button pops out.

7 Push the Release button a second time. The PC Card pops out. Gently grasp the card and pull it out of the slot.

8 Insert the PC Card slot protector into the empty slot.

Notes on using PC Cards

- For some PC Cards, if you alternate between normal power operation and the Standby or Hibernate power management modes while the card is inserted, you may find that a device connected to your system is not recognized. Reboot your system to correct the problem.
- Some PC Cards may require that you disable idle devices when using the PC Card. You can use Sony Notebook Setup to disable devices. See “Displaying the Sony Notebook Setup Screen” for more information.
- Be sure to use the most recent software driver provided by the PC Card manufacturer.
- If an exclamation mark (!) appears on the Device Manager tab in the System Properties dialog box, remove the software driver and then reinstall it.
- You may not be able to use some PC Cards or some functions of the PC Card with this notebook. If you have difficulty inserting a card, check that you are orienting the card correctly. See the manual that came with your PC Card for more information on use.

Using a Second Battery Pack

You can purchase a second rechargeable battery pack. With two battery packs, you can extend the time that you use your notebook with battery power. When using two battery packs, the battery pack you insert first charges first. The second battery pack you insert charges when the first battery pack is 85 percent full. You can monitor which battery pack is charging by observing the battery indicators.

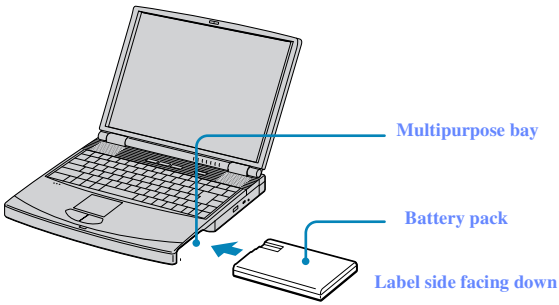
To insert a second battery pack

1 If another device is in the multipurpose bay, remove the device.

2 Insert the battery pack into the multipurpose bay.

If the battery is being used, the battery 2 indicator turns on.

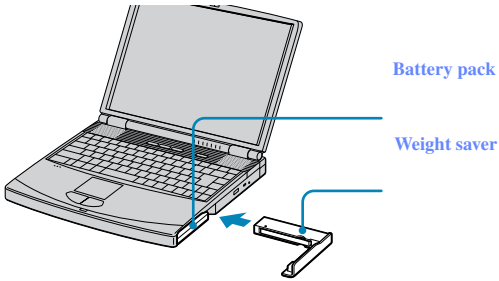
Second battery in multipurpose bay



3 Attach the weight saver to the notebook to stabilize the battery pack. There is a RELEASE lever on the bottom of the weight saver. Slide the lever toward the front of the notebook to lock the weight saver. See also “Using the Weight Saver” for more information.

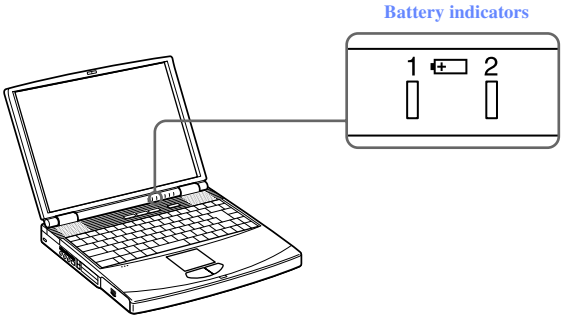
To charge the second battery pack

Using weight saver for second battery cover



Keep the battery pack in the notebook while it is connected to AC power. The battery indicator flashes while the battery is charging. See also “To charge the battery pack” in your printed QuickStart for more information.

Charging the second battery



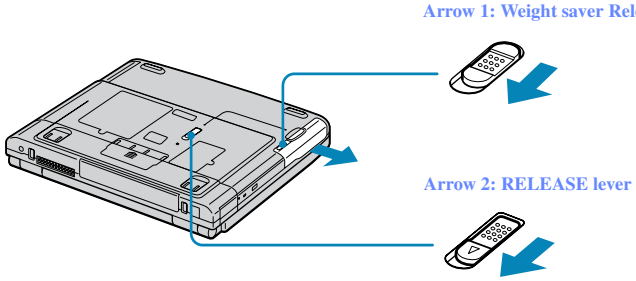
✍ To determine the amount of time the battery lasts, see “Displaying Battery Information” for more information.

To remove the second battery pack

If you attach two battery packs, you can remove either of them without shutting down the notebook. When removing one battery pack, make sure that the other battery pack’s indicator is on. If the indicator of the battery pack you are removing is on, right-click the battery icon on the task tray and click the “Switch discharge battery” option.

1 There is a Release lever on the bottom of the weight saver. To remove the battery pack, slide this lever in the direction of arrow 1, then slide the RELEASE lever on the bottom of the notebook in the direction of arrow 2.

Multipurpose bay release levers



2 Remove the weight saver, and then pull out the battery pack.

3 Reinsert the weight saver. See “Using the Weight Saver” for more information.

Using the Weight Saver

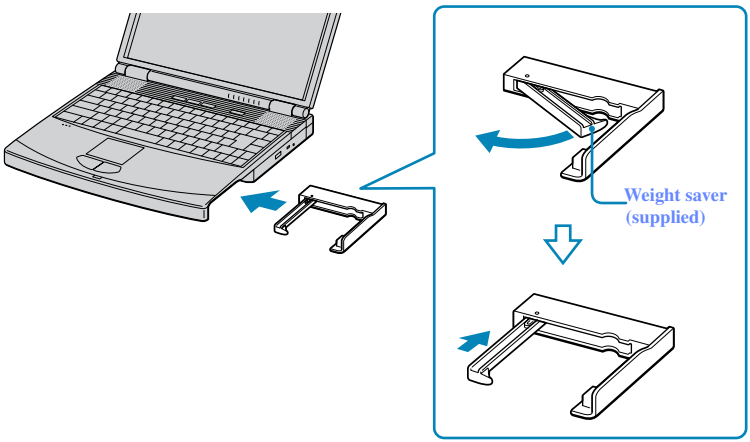
The weight saver protects the multipurpose bay when it is empty.

To attach the weight saver

1 If another device is in the multipurpose bay, remove the device. See “To remove the second battery pack” for more information.

2 Fold out the hinged arm of the weight saver and then push on the hinged arm to lock it into place. Slide the weight saver in the direction of the arrow until it clicks.

Inserting the weight saver

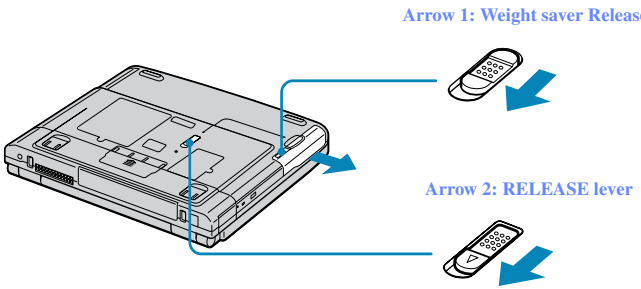


3 Manually lock the weight saver’s Release lever.

To remove the weight saver

1 There is a release lever on the bottom of the weight saver. To remove the weight saver, slide this lever in the direction of arrow 1, then slide the Release lever on the bottom of the notebook in the direction of arrow 2.

Multipurpose bay release levers



2 After removing the weight saver, pull out the weight saver's hinged arm and fold it into the weight saver.

Using Smart Connect

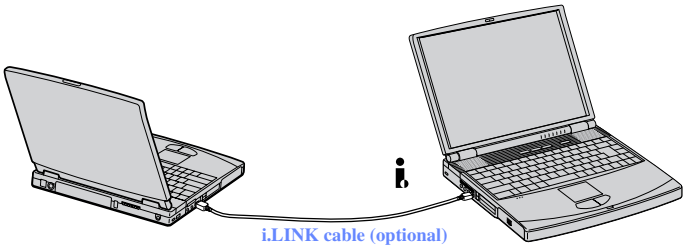
Windows Me™

You can connect your VAIO® Notebook to another VAIO computer that has the preinstalled Windows Me operating system or the Sony Smart Connect 3.0 software preinstalled. You may use an optional i.LINK®* cable to connect the two systems and then use one computer to edit, copy, or delete files on the other

* i.LINK is a Sony trademark used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

computer. You can also print from a printer that is attached to either computer. Select the STD mode in Smart Connect 3.0 software to connect with another computer that has Windows Me preinstalled.

Connecting with an i.LINK cable



Windows 2000

The preinstalled Smart Connect software allows you to use an optional i.LINK® cable to connect your VAIO notebook to another VAIO computer that also has Smart Connect or preinstalled Windows Me. You can then use one computer to edit, copy or delete files on the other computer. You can also print from a printer attached to either computer.

See Smart Connect online help for more information.

When you connect two VAIO computers, you must assign each computer a unique name. The computers can be identified by this unique name when the two computers are networked together.

If you have previously purchased a VAIO computer or notebook that does not have the Windows Me operating system or Smart Connect 3.0 software preinstalled, consult the Sony Web site for support options (http://www.sony.com/pcsupport).

Power Saving Modes

When you use a battery as the source of power for your notebook, you can take advantage of power management settings to conserve battery life. In addition to the normal operating mode, which allows you to turn off specific devices, your notebook has two distinct power saving modes: Standby and Hibernate. When

using battery power, be aware that the notebook automatically enters Hibernate mode when the remaining battery charge drops below 5 percent, regardless of the power management setting you select.

✍ If the battery level falls below 10 percent, you should either attach the AC adapter to recharge the battery or shut down your notebook and insert a fully charged battery.

Normal Mode

Normal mode is the normal state of your notebook when it is in use. The power indicator displays green when your notebook is in this mode. To save power, you can turn off a specific device such as the LCD or the hard disk.

Standby Mode

In Standby Mode the notebook saves the current state of the system in RAM and switches off power to the CPU. The amber power indicator flashes in this mode.

To activate Standby mode

To activate Standby mode, press the key combination Fn+Esc, or press the power button and release it immediately. You can also use the PowerPanel utility to enter Standby mode.

To return to normal mode

Press any key to return to normal mode.

Hibernate Mode

In the Hibernate mode, the state of the system is saved on the hard drive and power is turned off. The power indicator is off in this mode.

To activate Hibernate mode

To activate Hibernate mode, press the key combination Fn+F12.

✍ (Windows 2000) The “Save to Disk Manager” screen appears, and then the notebook enters Hibernate mode.

✍ Do not move the notebook until its power indicator turns off.

To return to normal mode

To return to normal mode, turn on the notebook by pressing the power button. The notebook returns to its previous state.

When returning from Hibernate mode, the system status stored on the hard disk is erased and the notebook starts normally if you press the power button and hold it for more than four seconds.

- Time required to return to normal mode

  Standby requires less time than Hibernate to return to normal mode.

- Power consumption

  Standby uses more power than Hibernate.

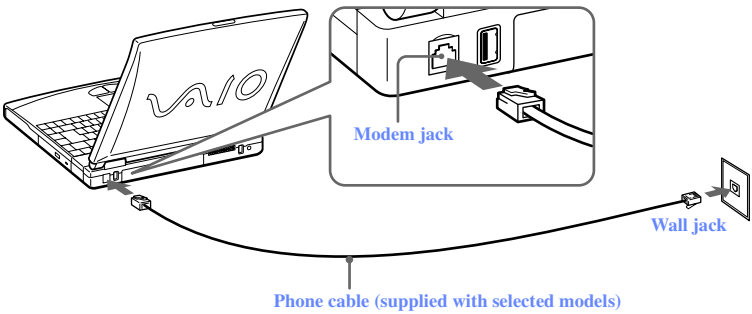
Connecting a Phone Line

You need to connect a phone cable (supplied with selected models) to take advantage of online services and the Internet.

In order to register your Sony VAIO® Notebook, register your software online, and use Sony Customer Support, you must connect to a phone line.

1 Plug one end of the phone cable into the modem jack on the notebook.

Connecting phone cable



2 Plug the other end into the wall jack.

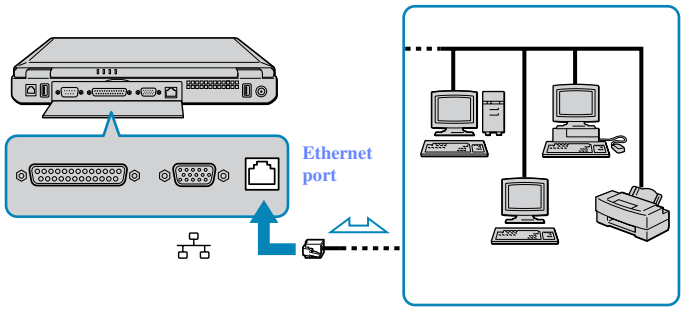
✍ Your notebook does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple phone lines or a private branch exchange (PBX). Some of these connections may result in excess electrical current and could cause a malfunction in the internal modem.

If you connect a phone line coming through a splitter, the modem or connected device may not work properly.

Connecting to a Local Area Network (LAN)

You can connect your notebook to 10Base-T and 100Base-TX-type networks. For the detailed settings and devices needed to connect to the network, ask your network administrator.

Connecting to LAN



Warning: Only connect 10Base-T and 100Base-TX cables to the Ethernet port. Do not connect any other type of network cable or any telephone line. Connecting cables other than those listed above may result in an electric current overload and could cause a malfunction, excessive heat, or fire in the port. To connect the unit to the network, contact your network administrator.

Note that if you enable Wake on LAN, the power saving mode will be switched to Standby mode.

Setting Up Your Ethernet Connection

Windows Me™ models

1 Right-click Network Neighborhood and select Properties.

2 Click Add to add a client, adapter, protocol, or service.

3 Click File and Print Sharing to enable these functions.

4 Select a Primary Network Logon.

5 Click the Identification tab to set the computer name, workgroup, and computer description.

6 Enter the necessary settings provided by your network administrator.

7 Restart your notebook.

Windows 2000 models

To connect to the network

1 Right-click My Network Places and select Properties.

2 Click Advanced and select Network Identification to set the computer name, domain, workgroup, and DNS suffix. You can also use the Network Identification Wizard.

To set the connections, bindings, and provider order

1 Right-click My Network Places and select Properties

2 Click Advanced and select Advanced Settings. This will give you access to Adapters and Protocol Bindings and Provider Order.

Connecting Peripheral Devices

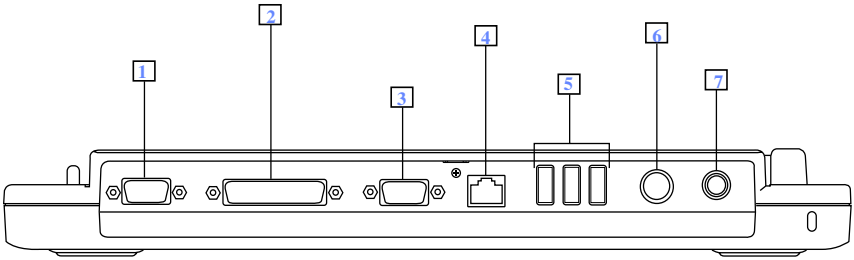
You can add functionality to your notebook by connecting a variety of peripherals, as discussed in the following sections:

- Connecting the Port Replicator
- Connecting an External Mouse or Keyboard
- Connecting a Parallel Port Printer
- Connecting a USB Printer
- Connecting an External Display
- Connecting a TV Display
- Connecting a Universal Serial Bus (USB) Device
- Connecting an i.LINK® Device
- Connecting External Speakers
- Connecting an External Microphone
- Expanding Your Notebook Capabilities

Connecting the Port Replicator

Your notebook supports the use of an optional port replicator (PCGA-PRFX1). Attaching a port replicator enables you to connect additional peripherals to your notebook.

Port replicator



1	Serial port	5	USB ports
2	Printer port	6	/ Mouse/Keyboard (PS/2 port)
3	Monitor port	7	DC In jack
4	Network (Ethernet 10BASE-T) jack		

The port replicator can be powered only with an AC power adapter. Do not remove the AC adapter from the port replicator or the AC outlet while using the port replicator; this may cause data damage or hardware malfunctions.

To attach your notebook to the port replicator

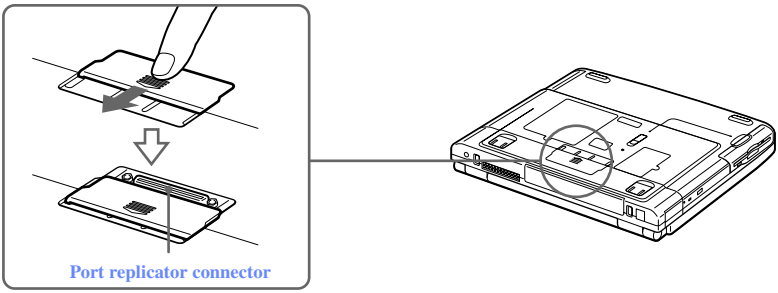
To supply power to your notebook while it is connected to the port replicator, you can connect the AC adapter directly to the port replicator.

When attaching your notebook to the port replicator, do not attempt to insert or remove the battery pack. Lifting and turning the notebook with an attached port replicator could cause a temporary loss of power.

1 Turn off your notebook and disconnect all peripheral devices.

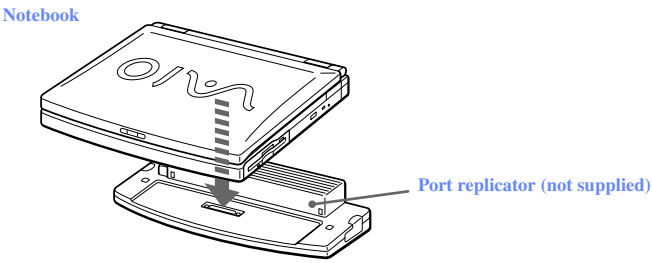
2 On the bottom of the notebook, slide the port replicator connector cover open.

Port replicator connector



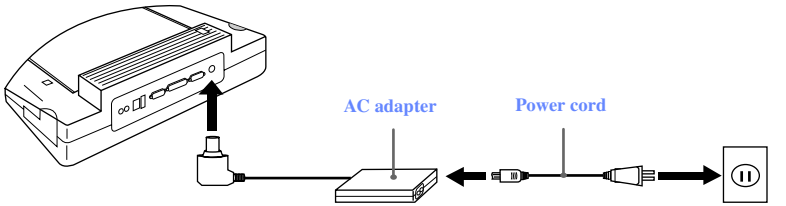
3 Attach the bottom of the notebook to the port replicator connector until it clicks.

Attaching notebook to port replicator



4 Plug the cable attached to the AC adapter into the **DC IN** jack on the port replicator. Plug the power cord into the AC adapter and an AC outlet.

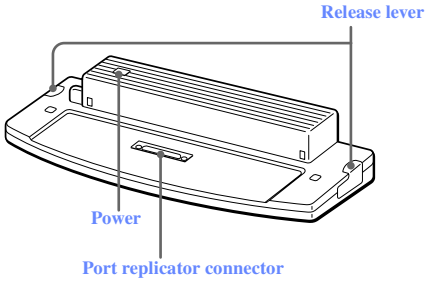
Connecting AC adapter to port replicator



✍ Use the AC adapter that comes with your notebook or an optional Sony adapter.

The power indicator turns green.

Power indicator



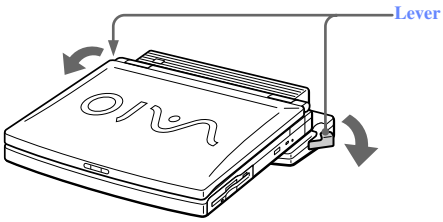
5 Turn on the notebook.

To remove your notebook from the port replicator

1 Turn off your notebook and the connected peripherals.

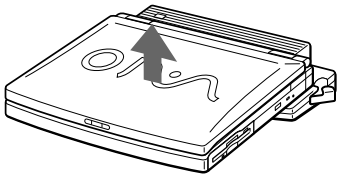
2 Pull the levers on each side of the port replicator to disengage the notebook from the port replicator.

Disengaging notebook from port replicator



3 Lift the notebook away from the port replicator.

Lifting notebook



4 Close the port replicator connector cover on the bottom of your notebook.

✍ It is extremely important to close the port replicator connector cover after removing your notebook from the port replicator. If the cover is left open, dirt may get inside and damage the notebook.

Connecting an External Mouse or Keyboard

You can connect an external mouse or keyboard to the optional port replicator using a similar type PS/2® plug or adapter.

✍ Before you connect or disconnect the mouse or keyboard, turn off the notebook.

You can only connect one external device at a time. Therefore, it is impossible to connect both a PS/2 mouse and PS/2 keyboard simultaneously.

To connect an external mouse or keyboard

- Locate the mouse/keyboard port on the port replicator identified by the / symbols.
- Plug the mouse or the keyboard cable into this port with the arrow facing up.

See the manual that came with your mouse or keyboard for more information on its installation and use.

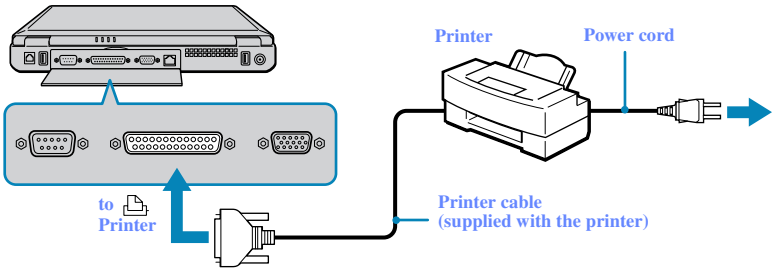
Connecting a Parallel Port Printer

You can connect a Windows Me/Windows 2000 compatible printer to your notebook to print documents.

To connect a printer

- Locate the Printer port identified by the symbol. Plug the printer cable (supplied with the printer) into this port on the notebook.

Printer port



See the manual that came with your printer for more information on its installation and use.

If your printer stops functioning after resuming from a power-saving mode, see "Troubleshooting the printer" for more information.

Before using the printer, you may need to change the Printer setting in the Sony Notebook Setup software. See "Displaying the Sony Notebook Setup Screen" for more information.

Connecting a USB Printer

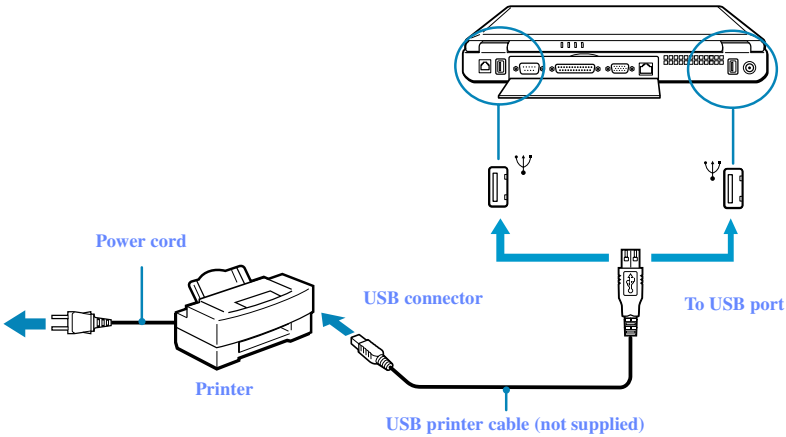
You can connect a Windows Me/Windows 2000 compatible USB printer to either of your notebook's two USB ports to print documents.

✍ To use a printer, first install the driver software that came with your printer.

To connect a USB printer

Plug the optional USB printer cable into one of the two USB ports on your notebook and the USB port on your printer.

Connecting a USB Printer



✍ See the manual that came with your printer for more information on its installation and use.

Connecting an External Display

You can connect an external display to your notebook. For example, you can use the notebook with any of the following:

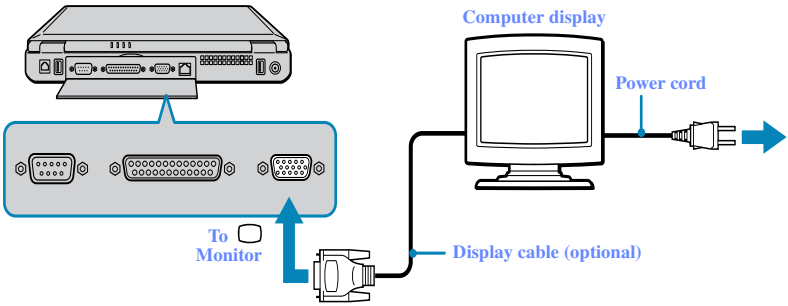
- Computer display (monitor)

- Multimedia computer display
- Projector

To connect a computer display

- Locate the Monitor jack identified by the 🖵 symbol on the back of the notebook. Plug the display cable (not supplied) into this jack.
- If necessary, plug one end of the display power cord into the display, and the other end into an AC outlet.

Connecting an external computer display



✍ See the manual that came with your computer display for more information on its installation and use.

To connect a multimedia computer display

You can connect the notebook to a multimedia computer display that includes built-in speakers and a microphone.

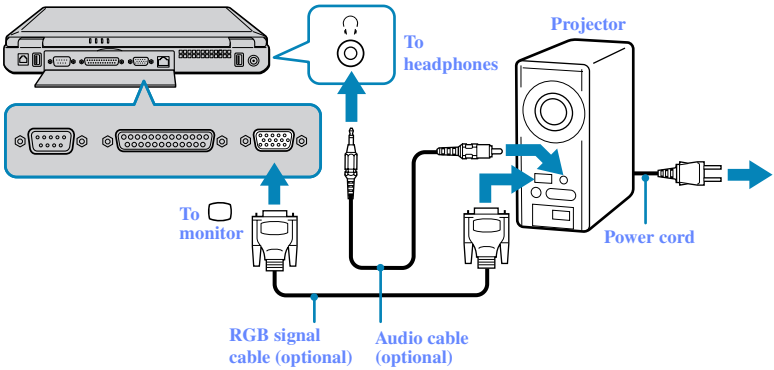
1. Locate the Monitor jack identified by the 🖵 symbol. Plug the display cable into this jack.
2. Locate the Headphone jack identified by the 🎧 symbol. Plug the speaker cable into this jack.
3. Locate the Microphone jack identified by the 🎤 symbol. Plug the microphone cable into this jack.

✍ See the manual that came with your multimedia computer display for more information on its installation and use.

To connect a projector

You can use a projector, such as the Sony LCD Projector, as an external display.

Connecting a projector



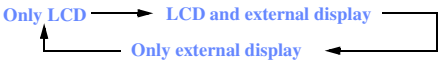
✍ See the manual that came with your projector for more information on its installation and use.

To select a display

When you connect an external display to the monitor jack, you can toggle the output between the Liquid Crystal Display (LCD), the external monitor, or both devices.

Use the Fn+F7 keys to select a display. See also “Selecting the Display Mode” for more information.

To	Press	Result
Switch to an external display	Fn+F7	Toggles between the LCD, the external display connected to the Monitor jack, or both the LCD and external display.

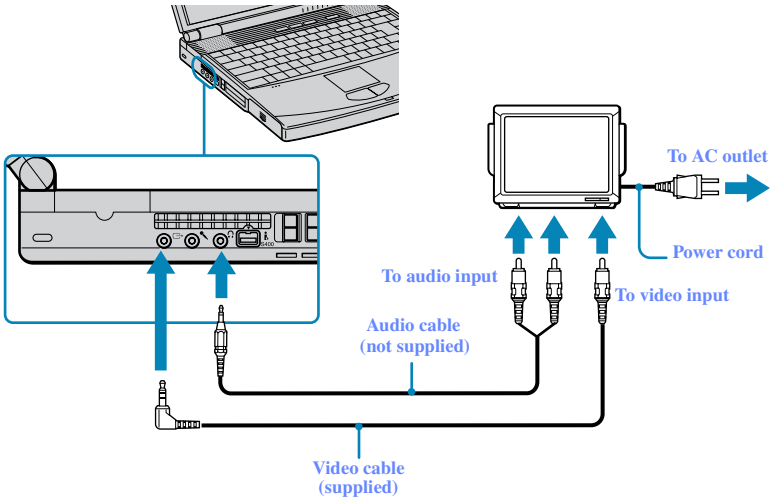


Connecting a TV Display

You can enjoy playing audio/video by connecting optional AV devices to your notebook. See also the manuals supplied with your AV devices.

To Connect a TV

- Connect the notebook to a TV using audio/video cables. Switch the input channel of the TV to external input.



✍ See the manual that came with your peripheral device for more information on its installation and use.

✍ TV Out does not work unless you start your notebook with the TV Out jack plugged in.

✍ If you insert a DVD in your optical drive to watch a video on your TV, the Fn+F8 key combination might not activate the function to toggle between your LCD and TV. Take the following steps:

1. Connect the TV to the notebook.
2. Restart the notebook and wait until it finishes.
3. Toggle between your LCD and your TV with the Fn+F8 key combination.

Your image is now displayed on both LCD and TV. Re-insert your DVD to launch your DVD software.

✍ A part of the image cannot be displayed on your TV display if the resolution of your notebook is more than 800 x 600 dots. The hidden area on your TV display can be seen by moving the cursor on your notebook. If you want to display the full image, change the resolution of your notebook to 640 x 480.

Connecting a Universal Serial Bus (USB) Device

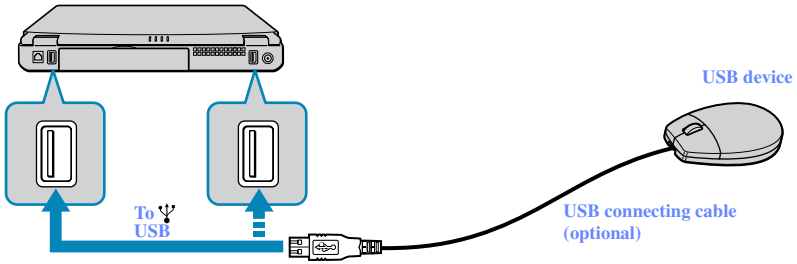
You can connect USB devices such as an external mouse, keyboard, speaker, and microphone to your notebook.

To connect a USB device

✍ The following steps describe the procedure for connecting a USB mouse to your notebook. Use the same procedure for connecting all USB devices.

- Locate the USB device identified by the ψ symbol. Plug one end of the USB cable into this port and the other end into the USB device.

Connecting USB device to USB port



You can use an optional Sony USB mouse PCGA-UMS1 series (not supplied) with this notebook. Since the USB mouse software driver is preinstalled in the notebook, you simply plug the USB mouse into the USB port to use it. One USB port supports one USB device.

✍ See the manual that came with your USB device for more information on its installation and use.

Connecting an i.LINK®* Device

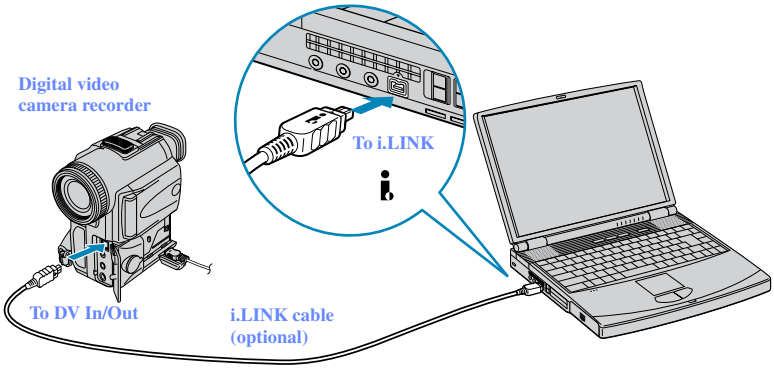
Your VAIO® Notebook includes an i.LINK® S400 (IEEE1394) port, which you can use to connect a compatible i.LINK device, such as an i.LINK enabled digital video camera recorder.

To connect a digital video camera recorder

- Plug one end of the i.LINK cable (not supplied) into the i.LINK port on the left side of the notebook and the other end into the DV In/Out port on the digital video camera recorder.

* i.LINK is a Sony trademark used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Connecting digital video camera recorder to i.LINK port



✍ The above figure displays a connection to a Sony digital video camera recorder; your digital video camera recorder may need to be connected differently.

Only Sony digital video camera ports labeled “DV In/Out” or “i.LINK” are compatible i.LINK devices.

See the manual that accompanied your digital video camera recorder for more information on its installation and use.

Do not connect more than one digital video camera at a time. The software supplied with your notebook will not recognize multiple cameras.

The i.LINK port on the notebook does not supply power to external devices. If the external device requires power from the i.LINK port, you cannot use the device with the notebook.

The notebook supports transfer rates up to 400 Mbps; however, the actual transfer rate is the lowest transfer rate of the external device.

The i.LINK features available may vary depending on the software applications you use. See the documentation that accompanied your software for more information.

The i.LINK cables compatible with your VAIO notebook include cables with the following part numbers: VMC-IL4415 (a 1.5-meter cable with a 4-pin connector at each end), VMC-IL4615 (a 1.5 meter-cable with a 4-pin connector at one end and a 6-pin connector at the other), and VMC-IL4408A (a 0.8-meter cable with a

4-pin connector at each end). You can purchase these cables from your local retailer, through the Sony VAIO® Direct Web site (http://www.sonydirect.com), or by calling 1-888-315-7669 (toll free).

Connecting External Speakers

You can enhance the sound quality of your notebook by connecting external speakers.

✍ Make sure your speakers are designed for computer use.

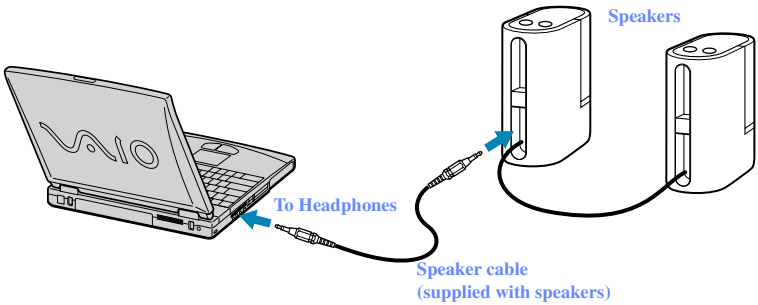
Turn down the volume of the speakers before you turn them on.

Do not place floppy disks on the speakers; the speakers' magnetic field may damage the data on the floppy disks.

To connect external speakers

❑ Locate the Headphone jack identified by the ∩ symbol on the side of the notebook. Plug the speaker cable into this jack.

Connecting speakers to the headphone jack



✍ See the manual that accompanied your speakers for more information on their installation and use.

Connecting an External Microphone

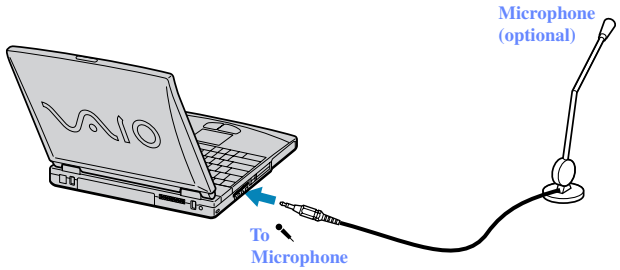
You can enhance the quality of sound input by using an external microphone.

✍ Make sure your microphone is designed for computer use. The microphone should be compliant with the plug-in power microphone.

To connect an external microphone

- Locate the Microphone jack identified by the 🎤 symbol on the side of the notebook. Plug the microphone cable into this jack.

Connecting microphone to microphone jack



✍ See the manual that accompanied your microphone for more information on its installation and use.

Expanding Your Notebook Capabilities

The following peripheral devices can be connected to your notebook, to expand the capabilities of your computer and enhance its versatility to meet your various business or personal needs:

- A Personal Digital Assistant (PDA)
- A Wireless LAN Access Point
- A Wireless LAN PC Card

Personal Digital Assistant

A handheld PDA is the quintessential personal planner and entertainment center that fits in your pocket. With a PDA, you can easily perform the following functions:

- Enter your schedule details in the calendar and view them by the day, week, or month, and even set an alarm to remind you of important events.
- Keep your contact names, addresses, phone numbers, and other details in the address book, and find them when you need them.
- Add tasks to the To Do List, prioritize them, and assign them due dates.
- Synchronize your data with the software on your notebook, to back up your data.
- Track expenses when you are out of the office, then transfer the data to your notebook.
- Exchange data with your notebook.

Wireless LAN Access Point

The Wireless LAN Access Point, which is also called the Access Point, is designed for building a wireless Local Area Network (LAN) environment. The Access Point comes with the Wireless LAN PC Card and required software. You can easily build a wireless LAN environment by plugging the Access Point into an AC power outlet, installing the Wireless LAN PC Card in your notebook, and using the provided software. Because a wireless LAN configuration requires no wiring, you can operate multiple computers more freely than ever before.

You can also connect your Access Point to a telephone line, Integrated Services Digital Network (ISDN) router, cable modem, or Digital Subscriber Line (xDSL) modem to share access to the Internet among multiple computers.

Wireless LAN PC Card

The Wireless LAN PC Card, which comes with the Wireless LAN Access Point, can be purchased separately and is designed for building a wireless LAN environment. The Wireless LAN PC Card can be used with or without the Access Point. With the Access Point, you can build a wireless LAN between computers that are equipped with the Wireless LAN PC Card and gain access to the Internet. Without the Access Point, you can achieve direct communication (Peer to Peer mode) between computers.

✍ For information on available Sony products, go to http://www.sonystyle.com/vaio/.

Customizing Your VAIO® Notebook

The following sections briefly describe how to change your notebook's default settings. You can also refer to Sony Notebook Setup Help for more detailed information.

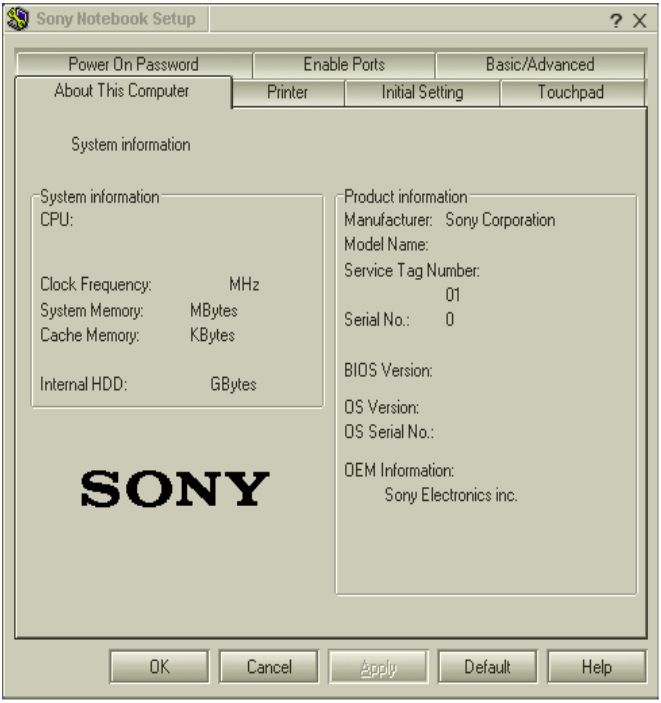
Displaying the Sony Notebook Setup Screen

To display the Sony Notebook Setup screen:

1 Click the Start button on the Windows® taskbar.

2 Point to VAIO and click Sony Notebook Setup.

Sony Notebook Setup Screen



3 Select the tab for the item you want to change. See “Sony Notebook Setup Tabs” for more information.

4 After you finish making your changes, click OK.

Sony Notebook Setup Tabs

Tab	Description
About This Computer	Display system information, including memory capacity, serial number, and BIOS version.
Printer	Select printer port mode settings.
Initial Setting	Change the volume of the sounds that play while the operating system is loading. Select the order of drives and devices from which you want to load the operating system. You can specify the hard drive as well as other drives inserted into your notebook.
Touchpad	When you connect an optional mouse to your notebook, you can make your touchpad inactive. You can also customize the settings of your mouse using the mouse utility.
Power On Password	Set the password to secure your notebook.
Enable Ports	Enable or disable ports. Disabling ports releases resources to the system. To change the serial settings, click Advanced on the Basic/Advanced tab.
Basic/Advanced	Switch between Advanced mode (additional screens with advanced settings) and Basic mode of display.

✍ For more information about each option, click Help on the Sony Notebook Setup screen to display the help file.

Controlling Power Management

The PowerPanel utility allows you to control the power management of your notebook and provides key information about system activity and battery life. The following sections briefly describe how to conserve your notebook's battery power. You can also refer to PowerPanel Help for more detailed information. To activate a profile or command, see "Displaying Battery Information" for more information.

Viewing the Power Management status icons

The Power Management status icons are displayed in the task tray at the lower right side of your screen. Move the pointer over the icons to see the tool tip that displays information about the active profile. The Battery status icon indicates the battery power level and the CPU status icon indicates the performance level of the CPU.

To activate the Power Management Toolbar

1. Right-click on the taskbar at the bottom of the screen.
2. Select Toolbars from the pop-up menu, and then click Power Management. The Power Management toolbar appears on the taskbar.

The current profile icon is highlighted on the Power Management toolbar. It is the first icon farthest to the left, and its appearance changes depending on which power management profile is currently selected. To change the power management profile, click the current profile icon, and then select a profile from the pop-up list. See "Power Management Profiles" for a description of available options. To select another power management profile, click that icon in the Power Management toolbar.

✍ When you use the battery pack to power your notebook, your system selects the Maximum Battery Life power management profile by default. If you select a different power management profile while using battery power, that profile is selected automatically the next time you use the battery pack to power your notebook.

Refer to the PowerPanel Help for information on customizing the Power Management toolbars.

You can change the power management settings, such as the system timer and the brightness of the screen.

To customize power management settings

1. Click the Current Profile icon on the Power Management toolbar.
2. Select Edit/Create Profiles from the menu.
3. Click a profile whose setting you want to change from the list in the left field.

4 Double-click an item whose setting you want to change from the list in the right field.

5 Click the desired setting.

6 Click the File menu, and then click Save.

7 Click the File menu, and then click Exit.

Power Management Profiles

The PowerPanel utility provides several predefined power management profiles. Each profile consists of a group of power management settings that are designed to meet specific power management goals—ranging from maximum power management to no power management. You can change the settings for any of the predefined profiles (except for the Disable Power Management profile), or you can create your own profile to suit your portable computing needs. The predefined profiles are:

Icon	Description
	Maximum Performance Provides the best system performance while still conserving power.
	Maximum Battery Life Provides power saving features to give you maximum battery life and good performance. It slows the notebook and puts it into Standby mode after a specified time period.
	Disable Power Management Turns off all power management features such as Standby and Hibernate modes. You can not change the settings of this profile.
	AC Power The power management state when AC power is in use. Similar to the Power Management Off setting. Power Management automatically loads the AC profile unless you disable this feature.
	Games Disables the display and the Hard Disk Standby timer.

Icon	Description
	Presentation Keeps the display on at all times while it conserves power. This option is ideal for slide show presentations. You can establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.
	Camera Optimizes performance and power requirements for camera usage.
	DVD Optimizes performance and power requirements for DVD usage.
	Word Processing Optimizes power management with longer timeouts on the hard disk and display screen. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.
	Spreadsheet Optimizes performance and power requirements for spreadsheet applications.
	Communications Extends battery life by initiating a quick display timeout. The Internal modem remains powered. You can also establish settings for LCD (Video) Standby, Hard Disk Standby, and Standby mode to optimize power management for your system.
	Automatic Profile Selection Automatically switches to a profile suitable for active applications.

Power Management Commands

PowerPanel also provides power management commands that you can use to activate specific power management functions and to control power for a specific device. You can use these commands to override a profile setting or initiate an immediate action.

Icon	Description
	Standby Puts the system into Standby mode, a power management state that saves the state of the system and peripheral devices in memory (RAM). Power consumption reduces to a minimum, and the system remains on. To return the system to the active state, press any key or the power button on your notebook.
	Hibernate Provides for the lowest level of power consumption. The system writes the state of the system and peripheral devices to the hard disk and turns off the system power. To return the system to the original state, use the power button to turn on power. The system saves the data in the Save to Disk Partition on the hard drive.
	LCD (Video) Standby (Windows Me™ only) Turns off the video display to save power. If you turn off the Video Standby timer, the display remains active except when the system enters Standby mode. The video display system is one of the largest consumers of power in the system.

Conserving Battery Power

When using the notebook with a battery, the LCD display and the hard drive can be set to switch off automatically to conserve battery power.

See “Power Management Profiles” for more information.

Displaying Battery Information

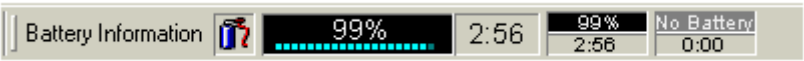
You can display information for each of the batteries in your notebook. The following sections briefly describe how to display your notebook’s general battery information. Refer to PowerPanel Help for more detailed information.

To activate the Battery Information toolbar

1. Right-click on the taskbar at the bottom of the screen.
2. Select Toolbars from the pop-up menu, then click Battery Information. The Battery Information toolbar appears on the taskbar.

To view the total capacity remaining in the battery, place the pointer over the batter status icon in the task tray on the lower right side of the screen.

Battery Information Toolbar



- **Percentage indicator —** Displays the percentage of the remaining capacity.
- **Time indicator —** Displays estimated time (hours:minutes) remaining before the battery fully drains, also known as the time-to-empty.

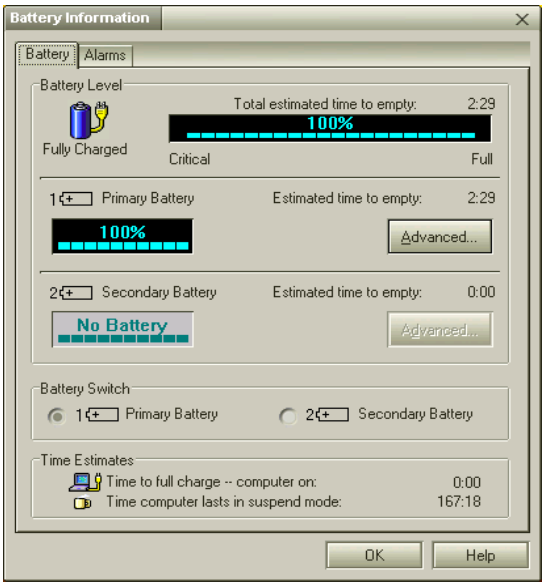
Battery Icon Descriptions

Battery icon	Battery status
	Charging
	Fully charged
	Discharging
	No battery

Displaying Detailed Battery Information

Double-click the battery icon on the task tray to display the Battery Information window. The screen appears displaying the Battery tab, which contains information such as the estimated time-to-empty and charging time.

Battery Information Window



Customizing the Battery Information toolbar and alarm system

You can customize the Battery Information toolbar and modify the alarm settings, to suit your portable computing needs. Refer to PowerPanel Help for more information.

Selecting the Display Mode

This notebook uses the Intel® video controller, which enables you to select the desired display when the notebook is connected to an external monitor. When you connect an external display, you can switch the display mode between your notebook's LCD display and the external monitor.

To select the display mode, proceed as follows:

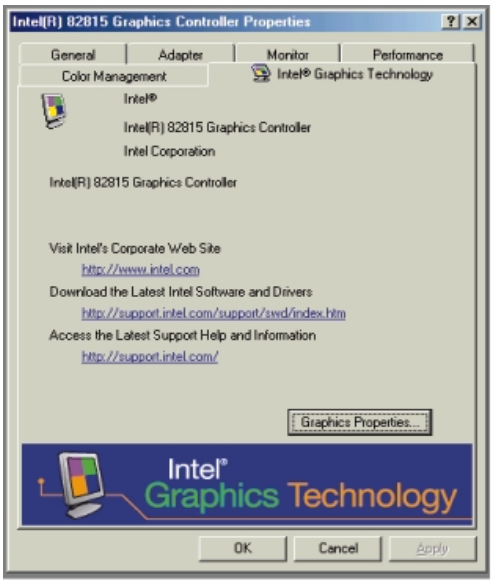
✍ See “Connecting an External Display” for more information.

1 Click the Start button, point to Settings, then point to Control Panel.

2 Click Display, to access the Display Properties window.

3 Click the Settings tab, then click the Advanced button, to display the Intel® 82815 Graphics Controller Properties dialog box.

Intel® 82815 Graphics Controller Properties Screen



4 Click the Intel® Graphics Technology tab, then click the Graphics Properties button. If you want to use the TV as a display, deselect the Synchronous Display Mode box, then click Apply. You cannot use the TV and another display simultaneously.

5 Click the Device tab.

6 Select the type of display.

✍ You may not be able to display the notebook LCD screen and an external display or projector at the same time, depending on the types of computer displays and projectors you are using.

If the display resolution of your notebook is more than 800 x 600 dots, a part of the image will not show up on your TV display. To see the hidden area, move the cursor on your notebook. To display the full image, change the display resolution settings to 640 x 480 dots.

Turn on the notebook after you turn on the peripheral devices.

Changing the Window Design of Sony Software

To change the window design

1. Click the Start button, point to Settings, then point to Control Panel.
2. Click UI Design Selector.
3. Click << or >> and select the desired design.
4. Click Apply.
5. The "UI Design Selector" window design changes. The window design for your Sony software will match the "UI Design Selector" window.
6. To try another selection, click << or >> and then click OK.
7. The "UI Design Selector" window closes and the Sony software window design displays.

✍ This feature is available with UI Design Selector-compatible software only.

Adding Memory

In the future you may want to install memory modules to expand the functionality of your notebook. Depending on the model you purchased, either 128 MB of memory is pre-installed in one of the two available memory module bays (128 MB x 1), or 192 MB is pre-installed utilizing both memory module bays (128 MB x 1, 64 MB x 1). You can increase memory up to 512 MB (256 MB x 2), by installing optional memory modules (64 MB, 128 MB, or 256 MB) in the memory module bays. Expansion memory modules are available as options. For memory upgrades, use only PC100 (CL2) SDRAM SO-DIMM (gold lead contacts).

Make sure you observe the proper safety precautions when you install memory modules in your notebook. See the bulleted list below. Be careful when adding memory. Mistakes when installing or removing a memory module may cause a malfunction.

Before you start

- The procedures described below assume you are familiar with the general terminology associated with personal notebooks and with common safety practices required for using and modifying electronic equipment.
- Disconnect your system from its power source and from any telecommunications links, networks, or modems before you open the system or follow any of the procedures described below. Personal injury or equipment damage may result from failure to take these precautions.
- Electrostatic discharge (ESD) can damage memory modules and other components. Perform the procedures described below only at an ESD workstation. If such a station is not available, do not work in a carpeted area, and do not handle materials that produce or hold static electricity (cellophane wrappers, for example). Ground yourself by maintaining contact with an unpainted metal portion of the chassis while performing the procedure.

- Do not open the memory module package until you are ready to install the module. The package protects the module from ESD.
- Use the special bag for preventing ESD or use aluminum foil when you store the memory module.

128 MB Memory Models

Typical expansion memory configuration

Total System Memory (MB)	Slot 1 (MB)	Slot 2 (MB)
128	128 (pre-installed)	
192	128	64
256	128	128
512	256	256

192 MB Memory Models

Typical expansion memory configuration

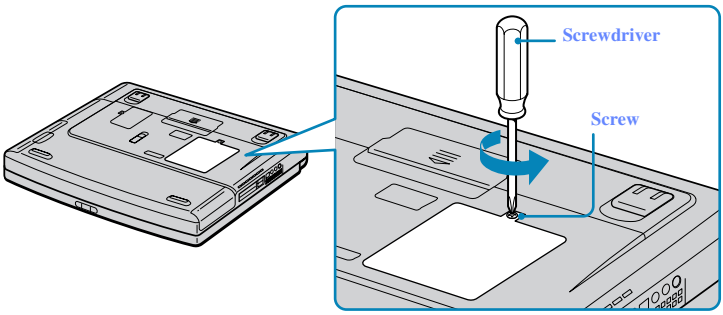
Total System Memory (MB)	Slot 1 (MB)	Slot 2 (MB)
192	128 (pre-installed)	64 (pre-installed)
256	128	128
512	256	256

To remove a memory module

1. Shut down your notebook and disconnect all peripheral devices, such as your printer.
2. Unplug the notebook and remove the battery pack(s).

3 After the notebook has cooled, loosen and remove the screw that secures the cover of the memory bay on the bottom of your notebook. Use an appropriate screwdriver.

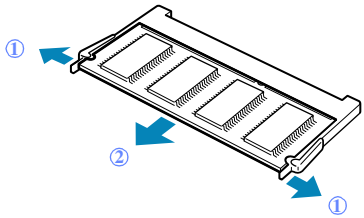
Removing the memory module cover



4 Touch a metal object (such as the connector panel on the back of your notebook) to discharge any static electricity.

5 Remove the memory module.

Removing memory module



①Pull the tabs in the direction of the arrows. The memory module is released.

②Pull the memory module in the direction of the arrow.

6 Tighten the screw on the memory bay cover.

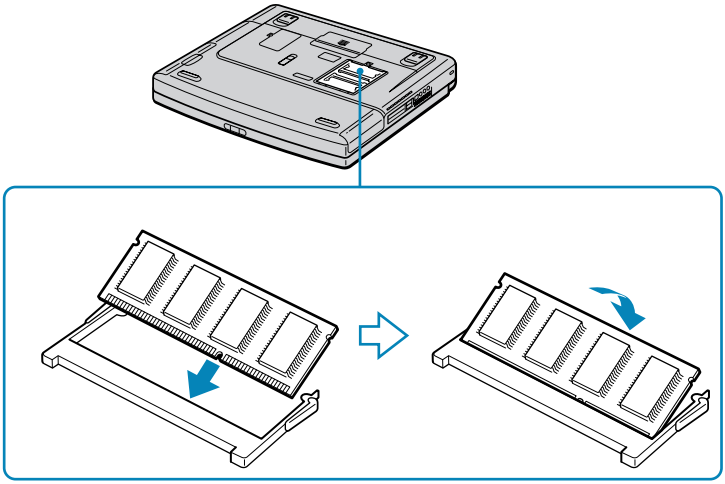
To install a memory module

1 Follow steps 1 to 4 of “To remove a memory module” .

2 Remove the memory module from its packaging.

3 Install the memory module.

Installing memory module



1 Slide the memory module into the slot. 2 Press the module into place until it clicks.

4 Tighten the screw on the cover of the memory bay.

To view the amount of memory

1 Restart the notebook.

2 Click the Start button on the Windows status bar, point to VAIO option, and click “Sony Notebook Setup.”

The Sony Notebook Setup screen appears.

3 Click the “About This Computer” tab to view the amount of system memory. If the additional memory is not shown, repeat steps 1 through 4 in “To install a memory module” .

About the Software on Your Notebook

Your VAIO® Notebook is ready to help you work, play, learn, and communicate as soon as you turn it on. This section provides the following information:

- An overview of the various software that come with your notebook and the activities you can perform with your software
- Software support information
- Details on your Sony application, driver, and system recovery CDs

Overview

Adobe Acrobat™ Reader

Adobe Systems, Inc.

Acrobat Reader software enables you to view, navigate, and print electronic documents in Adobe Portable Document Format (PDF), an open file format that is intended to preserve the fidelity of documents created on all major computer platforms.

Adobe Photoshop® Elements (Windows Me only)

Adobe Systems, Inc.

Adobe Photoshop Elements offers unique features designed specifically for amateur photographers, hobbyists, and business users who want an easy-to-use, yet powerful digital imaging solution.

✍ When you start Adobe Photoshop ® Elements for the first time, you will be prompted to enter a product code for the application to work correctly. This code is found in the printed Adobe information that is included with your notebook.

Adobe Premiere® LE (On selected models)

Adobe Systems, Inc.

Adobe Premiere LE offers an interface and editing tool for producing movies for video, multimedia, or the Web. View source clips and edited footage simultaneously on the monitor window. Create video clips up to three hours long with complete audio-video synchronization.

America Online®

America Online, Inc.

America Online is a popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail, manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

Apple QuickTime™

Apple Computer Inc.

QuickTime is the Apple technology that makes video, sound, music, 3D, and virtual reality come alive for our Internet browser and Windows.

ArcSoft PhotoPrinter® 2000 Pro (Windows Me only)

ArcSoft Inc.

ArcSoft PhotoPrinter 2000 is an easy-to-use, advanced printing program that lets you quickly lay out multiple images in multiple sizes on a single sheet of paper. PhotoPrinter Pro offers a wide selection of templates including landscape, portrait, free style, mixed sizes, custom templates and more. The application includes enhancement tools and special effects for improving photos while giving you the ability to add text to any image.

CompuServe® 2000

CompuServe Interactive Services, Inc.

CompuServe is the most comprehensive source of organized business and educational information online today. CompuServe allows you to access the vastness of the Internet, without wasting time wading through it. Maximize your time online with CompuServe.

DVgate™

Sony Electronics Inc.

Connect a compatible digital video camera recorder to the i.LINK®* connector and capture your own video clips and still images. You can edit clips from your video, add others, and combine clips into new movie segments. You can also save your images in a variety of popular file formats.

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* i.LINK is a Sony trademark used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Easy CD Creator™

Roxio, Inc.

Easy CD Creator lets you make your own data, audio and multimedia CDs. You can back up your important files to CD, and read them back on standard CD-ROM drives. Create your own audio CDs right on your desktop, and play them back on your home or car stereo CD player. You can make your own personalized color jewel case inserts with custom text and graphics. You can even make backup copies of your existing CDs. The Easy CD Creator Wizard makes creating your own custom CDs a simple process.

Microsoft® Internet Explorer

Microsoft Corp.

Internet Explorer delivers the Web the way you want it. It is safe, easy to use, and you can personalize how you access the Web. Outlook Express and other tools in Internet Explorer also help you have a great experience when you are on the Web.

Microsoft® Word

Microsoft Corp.

Microsoft Word makes it easy to create shared Web, e-mail, and print documents for use around the world. It embraces HTML as a first-class file format and extends Word's ease-of-use to the Web and e-mail. Word also extends that ease-of-use to international users, making it simple to create multilingual documents.

MovieShaker™

Sony Electronics Inc.

Sony's original MovieShaker software creates personal movies that have transitions, background music and text. Just import your video clips and "shake" with a click of the mouse. Your personal movies are easy to create and fun to share with family and friends. (See "MovieShaker™" for more information.)

Netscape Communicator®

Netscape Communications Corp.

Netscape Communicator is an all-in-one Internet tool that makes it easy to browse the Web, send Internet e-mail, chat, read newsgroups, and compose great Web documents.

Norton AntiVirus™

Symantec Corporation

Norton AntiVirus provides security for your Internet and e-mail communications. This powerful antivirus software works in the background to continuously protect your PC, by scanning the files you download from the Web and receive as e-mail attachments. Each time you connect to the Internet, Norton Antivirus updates its virus definitions to deliver automatic protection today and in the future.

OpenMG™ Jukebox

Sony Electronics Inc.

OpenMG Jukebox software enables you to import digital audio files by downloading audio files from Electronic Music Distribution (EMD) services over digital networks, such as the Internet. You can record audio CDs onto your hard drive in a variety of formats.

PictureGear™

Sony Electronics Inc.

This image management software displays images from your hard drive, a Sony digital still camera, or a Sony Mavica® camera. The images appear in a convenient light-table format, so that you can easily view the contents of an entire folder. (See "PictureGear™" for more information.)

Prodigy Internet®

Prodigy Communications Corp.

An online service that helps you find what you need online faster and smarter. Prodigy delivers powerful online content such as sports scores, stock quotes, news, and easy access to Excite, plus quality customer service, all at a competitive price.

Quicken® 2001

Intuit Inc.

Quicken is a fast, easy way to organize your finances. Quicken works just like your checkbook, so it is easy to learn and use. Quicken manages all your finances, bank accounts, credit cards, investments, and loans. You can even pay your bills online.

RealJukebox

Real Networks Inc.

RealJukebox is one of the world's most widely used personal music management systems. Using RealJukebox, you can capture the contents of a music CD, manage and play back your music, and view various music-related information via the Internet. This Custom RealJukebox for Sony allows seamless check-out capabilities to a wide range of Sony personal audio devices, and offers convenient links to Sony product and music service home pages.

✍ If you are using an external CD-ROM drive connected with a PC Card, be sure to connect your external CD-ROM drive before starting RealJukebox. Additionally, do not remove your CD-ROM drive while using RealJukebox. Either of these actions may cause RealJukebox to shut down improperly.

RealPlayer®

Real Networks Inc.

RealPlayer is the RealNetworks video and audio player which lets you access 2,500 radio stations featuring music, news and sports.

RealProducer®

Real Networks Inc.

RealProducer converts your audio and video files, or live feeds, into RealAudio and RealVideo for the Internet or your intranet. RealProducer is easy to use, gives you better control over your content, and is packed with exclusive features. Featuring support for CD-quality RealAudio 8 and VHS-quality RealVideo 8, RealProducer is an excellent choice for both beginners and pros.

Smart Capture

Sony Electronics Inc.

Smart Capture is a fun new way to send multimedia messages via e-mail. Smart Capture manages the i.LINK® connection between your computer and a Sony Digital Handycam® Camcorder that supports the i.LINK interface. It allows you to capture compressed video or still images that you can save or share via e-mail. A smart solution to computer, digital audio/video and network convergence.

Smart Connect (Windows 2000 only)

Sony Electronics Inc.

Smart Connect allows you to use an i.LINK cable to connect your VAIO computer to another VAIO computer that supports Smart Connect. You can then use one computer to copy, delete, and edit files on the other computer. You can also print from a printer attached to either computer.

SoundForge® XP (On selected models)

Sonic Foundry, Inc.

SoundForge XP allows you to put powerful audio processing tools and effects to work on your notebook. Simply cut, copy, and paste your way to striking multimedia files for use in everything from Web pages to desktop presentations.

VAIO Action Setup

Sony Electronics Inc.

VAIO Action Setup manages the settings for your notebook's Shortcut keys and i.LINK interface.

VAIO Support Agent

Sony Electronics Inc.

VAIO Support Agent provides immediate, interactive online support.

VisualFlow™

Sony Electronics Inc.

VisualFlow software is a state-of-the-art Sony multimedia browser designed specifically for Memory Stick® media. It displays any still picture, movie, or sound file stored in a Memory Stick media in a visually pleasing, artistic manner. VisualFlow software not only plays a selected movie or sound file, but also enables playback of files by other applications such as PictureGear, Memory Stick Slideshow, and Windows Explorer.

WinDVD® 2000

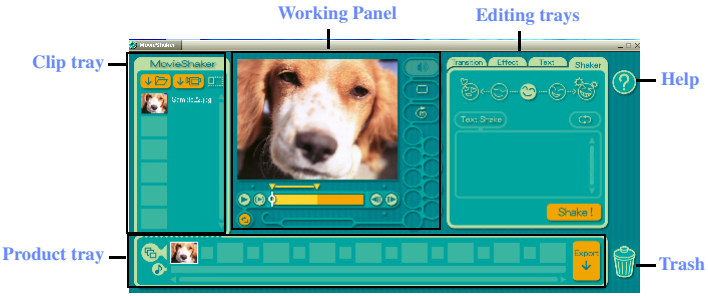
InterVideo Inc.

WinDVD is a simple-to-use DVD player combining all the features you would expect to find in a standard consumer DVD player, in addition to some very advanced functionality, such as full VCD 2.0 support, full precision video decode, a choice of user interfaces, and video display options. You can play DVD titles or Video CDs. WinDVD automatically determines the type of disc in the DVD drive and uses the correct playback method.

MovieShaker™

This application can be used to create fun and innovative movies without any prior knowledge of film editing. In a few simple steps, motion pictures can be combined with special effects, still images, and music files, and then saved in a format compatible with most computers.

Main Window



Importing Images and Sound Clips

1 Click (File Import) or (DV Import).

2 Find the file you want to add.

3 Select the file.

4 Click Open. The file is added to the Clip tray.

✍ Importing large files may cause MovieShaker software to stop responding.

Create a Movie using Shaker

After adding clip(s) to the Clip tray, you can create a short movie using the Shaker feature. Shaker randomly select clips from the Clip tray to create a 30-second scene.

1 Click the Shake tab.

2 Select a mood by clicking a face in the Shaker tray.

Shaker Tray

3 Click Shake ! . A 30-second scene is automatically generated and saved to the Product tray.

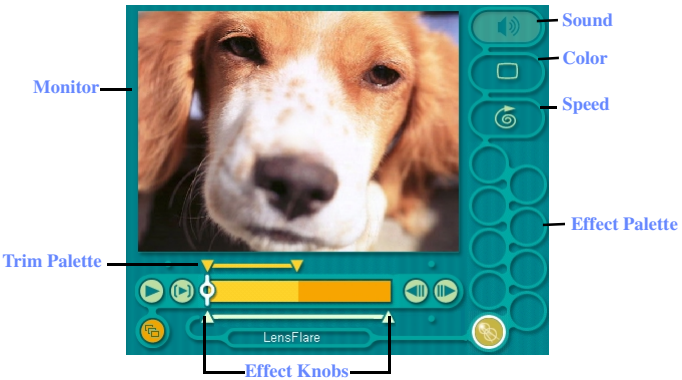
4 To preview, switch the scene from the Product Tray to the Work Panel and press play.

✍ Scenes created with Shaker begin with a black frame and after processing are placed in the first available slot on the Product tray. Limit the number of scenes placed on the Product tray to five or fewer. MovieShaker software may stop responding if too many scenes are placed on the Product tray.

Editing Clips and Scenes

You can edit your movie by adding effects and text, adjusting the color and contrast, and modifying the length of clips.

Working Panel



Adding effects to a scene or a clip

1. Double-click the clip or scene to move it to the Working Panel.
2. Select the Effects tab from the Editing tray.
3. Drag and drop the Effect you want to add from the Effects tray to the Effects palette on the Working Panel.

> ✍ To preview an Effect, click on the clip in the Working panel monitor. Your clip displays with the new effect on the Effect tray monitor.

4. See Help for instructions on adjusting effect duration and replaying clips and scenes.

Saving a Movie

1. Verify that the clip(s) you want to save is on the Product tray. See Help for more details on saving movies.
2. Click Export.

3 Select the format in which you want the clip to be saved.

4 Click Next.

5 Locate the folder to which you want the file saved.

6 Name the file.

7 Click Save.

Exporting movies may take a long time to complete—Quick-Save is the fastest way to save a movie, while "Save movie as DV" (Digital Video) takes the longest. MovieShaker can play video files up to 65 MB in length.

For DV playback and smooth video playback, we recommend the following resolution refresh rates: 1024 x 768/75 Hz or lower.

PictureGear™

PictureGear software is a digital image management application that enables you to see all the images stored in any directory on your notebook. Thumbnail views provide quick reminders of your pictures. Brighten, contrast, enhance, resize, crop, and color-correct your pictures. Create panoramic views, animations, screen savers, wallpaper, still pictures from MPEG, and even HTML photo albums.

Managing Your Pictures

Use the Collection feature to manage your pictures.

1 From Collection menu, select Create New Collection.

2 Enter a name for the collection and then click OK.

3 Click the Folder tab and browse to locate your pictures.

4 Select the pictures you want to have in a collection.

5 Select Add File to Collection.

6 Select Collection Folder and then click OK.

Creating a Photo Album

1. Select the pictures you want to use to make an album.
2. From the Utilities menu, select Album Maker.
3. Choose the type of Album you want and click OK.
4. Now add more pictures, frames, text, and effects.
5. When you are finished, select Create Album in File menu or click the Create Album icon on the toolbar.
6. Designate the folder you where want to save the Album.
7. Enter the Target Album name, select Thumbnails and click OK.
8. The new album can be viewed using most Internet browsers.

Using Panorama Maker

Panorama Maker stitches a group of still images into a 360-degree panoramic picture. The source images should be the same size and overlap 20 percent.

How to stitch a panoramic picture:

1. Gather the source images into the same folder or collection.
2. Select the images you want to use.

✍ Sony recommends creating your panoramic picture with 12 landscaped or 16 portrait pictures.

3. From the Utilities menu select Panorama Maker.
4. Select the correct lens and click OK. (If 35mm lens is selected, the prompt does not appear. To select a different lens, click the lens icon.)
5. Click the panoramic icon, near the bottom of the window.
6. Click Full Stitch.

Making Still Images and Panoramic from MPEG

1. Select the MPEG file.
2. From the Movie/Sound menu, select Scene Break Down.

3 Then select Movie Stitch, to create a panoramic picture.

OpenMG™ Jukebox

OpenMG Jukebox is a software application that utilizes Sony Corporation's copyright protection technology. OpenMG Jukebox maintains the holder's copyrights by preventing unauthorized distribution of digital audio files.

OpenMG Jukebox software enables you to play and record audio CDs and import digital audio files while maintaining the copyright information of the contents. When you record an audio CD with OpenMG Jukebox, it is encoded in ATRAC3 format onto your notebook's hard drive. You can download digital audio files from Electronic Music Distribution (EMD) services. The imported data can be played on your notebook or transferred to external devices or media. OpenMG Jukebox converts your existing MP3 and WAV format audio files into OpenMG format (WAV format audio files are converted into ATRAC3 format or changed into OpenMG MP3 format).

Your VAIO® Notebook ships with OpenMG Jukebox 2.0 installed. Other external devices that are compatible with OpenMG Jukebox may contain an earlier version of the software (Version 1.0, 1.1, or 1.2). Do not install an earlier version of OpenMG Jukebox on your notebook, as this may cause the software to work improperly or damage your audio files.

Electronic Music Distribution (EMD) Services

EMD allows you to download music files via the Internet. To use Internet services that are compatible with OpenMG Jukebox, you need:

- Access to the Internet from your notebook. Sign up with an Internet Service Provider (ISP) and configure your notebook for Internet access before using EMD services.
- An EMD service provider. Consult the provider for details regarding service.

To protect your personal data, Sony uses Secure Sockets Layer (SSL), an encryption protocol for communication between your browser and Sony's World Wide Web (WWW) server. If you are accessing the Internet from an enterprise Local Area Network (LAN), you may not be able to use SSL due to the proxy server of the LAN. Contact your network administrator for more information.

Starting OpenMG Jukebox 2.0

1 From the Start button on the Windows taskbar, select Programs, OpenMG Jukebox, and then click on OpenMG Jukebox.

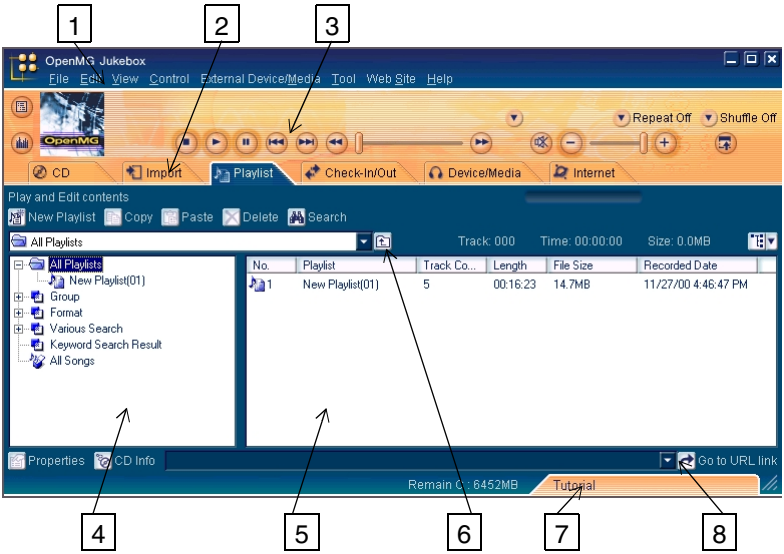
The CDDB® Music Recognition Service Registration wizard appears. Follow the onscreen instructions to complete registration.

> ✍ To register with CDDB, you will need Internet access from your notebook. For more information regarding CDDB registration, click the Help button.

2 When you have registered with CDDB, the "Set OpenMG Jukebox as the Application for playing Audio CD" dialog box appears. You can set OpenMG Jukebox as the default application for playing audio CDs by selecting the appropriate checkbox.

3 Click OK. The OpenMG Jukebox window appears.

OpenMG Jukebox 2.0 Basic Features



1	Menu bar Displays OpenMG Jukebox menus.	5	File List view Lists the items under the selected folder in the File Tree view.
2	Screen Tabs Change the operational sheet view according to function.	6	Drop-down list Displays the playlists, audio files, etc., of the current screen tab.
3	Player control buttons Control playback (play, stop, pause, etc.).	7	Tutorial tab Opens and closes the Tutorial screen.
4	File Tree view Displays the folders on your notebook.	8	URL drop-down list Displays URL address information if available. Clicking the “Go to URL link” button connects to the Internet Web page of the URL.

Recording a CD

You can record songs from audio CDs and import them to playlists within OpenMG Jukebox.

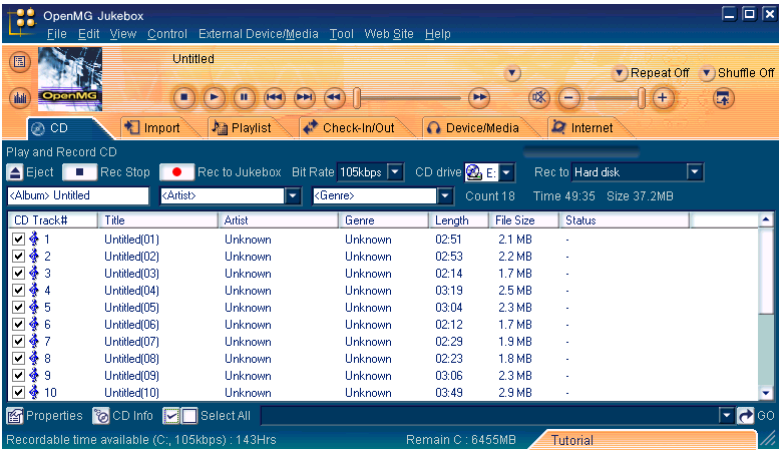
✍ When you record from an audio CD on your optical drive for the first time, the “CD Drive Optimization” dialog box appears. Click Start to verify your optical drive. After the verification is performed, recording begins.

1 Insert an audio CD into the optical drive.

2 Click the CD tab.

3 Select the Bit Rate, CD drive, and Record to location from the drop-down lists.

CD tab screen



4 To select certain tracks from your CD, uncheck any unwanted tracks. You can also click the empty checkbox next to Select All (clears all checkboxes), and then select the desired tracks.

5 Click Rec to Jukebox to begin recording. When the recording is finished, the new playlist appears in the File Tree view of the Playlist screen tab.

✍ To name the album and songs, type the name, or retrieve it from the CDDB Web site on the Internet at http://www.cddb.com/cddb2info/using.html.

Transferring Songs (Check-in/Check-out)

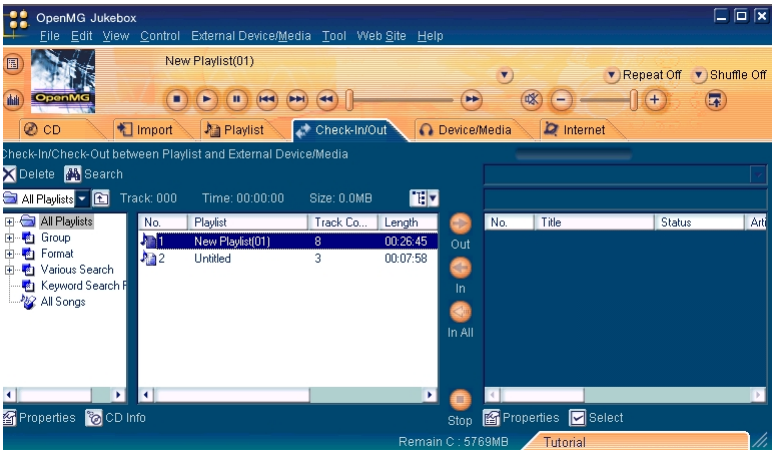
You can transfer songs between the playlists of your OpenMG Jukebox and external devices/media. For details on using your external devices/media, see the user guide that came with your product. These instructions are for the Check-in/Check-out 1 step mode; for information on 2 step mode, see “Changing the check-in/check-out settings” in the OpenMG Jukebox Help menu.

Check-out

1 Connect the external device/media to your notebook.

2 Click the Check-in/Out tab to display the Check-in/Out screen. Your notebook recognizes the connected external device/media and lists the information on the right side of the screen.

Check-In/Out tab screen



3 Select the Playlist containing the song that you want to check out. The songs in the playlist are listed in the Playlist view in the center of the screen.

4 In the Playlist view, select the song to be checked out. To check out more than one song at a time, hold down the Ctrl key and click the songs to be selected.

5 Click (Out), or drag and drop the song to the desired position in the song list of the external device/media. Check-out begins.

To cancel Check-out, click (Stop), or click Cancel in the Processing dialog box displayed during Check-out.

Check-in

✍ You can only check-in songs recorded on external devices/media to the hard drive of the same notebook from which the songs were checked out.

1 Connect the external device/media to your notebook.

2 Click on the Check-in/Out tab to display the Check-in/Out screen. Your notebook recognizes the connected external device/media and lists the information on the right side of the screen.

3 Select the song to be checked in from the song list of the external device or media. To check in more than one song at a time, hold down the Ctrl key and click on the additional songs to be selected.

4 Click (In), or drag and drop the song(s) to the Playlist view. If you want to check in all of the songs in the external device/media, click (In All). Check-in begins.

✍ To cancel check-in, click (Stop), or click Cancel in the Processing dialog box displayed during the Check-out process.

For more information about using OpenMG Jukebox 2.0 software, go to the online OpenMG Jukebox Help file. You can access the OpenMG Jukebox Help file using either of the following instructions:

1 Click the Start button on the Windows taskbar, select Programs, and OpenMG Jukebox, and then OpenMG Jukebox Help.

2 From the OpenMG Jukebox Help menu, select OpenMG Jukebox Help.

Additional OpenMG Jukebox Features

- **OpenMG Jukebox Tutorial —** In the Tutorial screen, the available operations of OpenMG Jukebox are briefly described. By clicking items in the screen, you are guided directly to the desired operations of OpenMG Jukebox.
- **OpenMG Jukebox Backup Tool —** Allows you to back up and restore all the data managed by OpenMG Jukebox, including music, graphics, and information. You must be connected to the Internet to use OpenMG Jukebox Backup Tool.

- **Import audio files in various formats —** You can import downloaded or stored audio files in various formats, such as MP3, WAV, or WMT (which is compliant with Windows Media Technologies with the extensions .asf or .wma), and manage them on the Playlist of OpenMG Jukebox.
- **Manage imported songs on the Playlist —** By registering imported songs to the Playlist of OpenMG Jukebox, additional features are made available other than playback. You can create a list of songs categorized by genre or artist, display the created list on a Playlist, and manage these songs in a hierarchical structure by using Playlist folders. You can also edit songs so that multiple songs are created as one (Combine), or divide one song into two (Divide).
- **Simple mode —** Allows you to perform playback operations only. The operation panel in simple mode is much smaller than in full mode. This is especially useful when you want to play songs with OpenMG Jukebox while using other software, or when you feel that the operation panel in full mode is too large. Additionally, the design of the operation panel in simple mode can be changed by adding a new Skin. Therefore, you can enjoy various panel designs when the skins supporting OpenMG Jukebox soon become available.

Notes on performing the System Restore function of System Tools on Windows® Millennium Edition

If you perform the System Restore function of System Tools on Windows Me, the OpenMG Jukebox version 2.0 database may become corrupted and all music files recorded or imported may not play. Follow the steps below to back up and restore all music files managed by OpenMG Jukebox.

1. Before performing the System Restore function, back up your music files by using OpenMG Jukebox Backup Tool. This will help prevent unwanted loss of music files.
2. After performing the System Restore function, restore your music files by using OpenMG Backup Tool. This will help to ensure the reliability of playback.

For details on using OpenMG Jukebox Backup Tool, refer to the online help for OpenMG Jukebox.

Notes on using Portable Players

If you have purchased a Portable Player such as NW-MS7 or NW-E3, do not install the version of OpenMG Jukebox that came with the Portable Player. Your notebook already has OpenMG Jukebox version 2.0 preinstalled. Overwriting OpenMG Jukebox version 2.0 for VAIO computers may generate malfunctions.

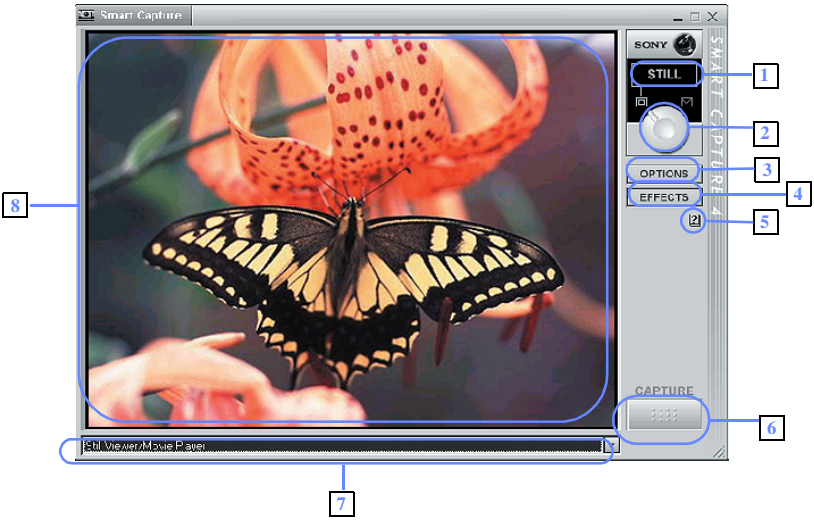
To connect your Portable Player to your VAIO® Notebook, you need a plug-in for OpenMG Jukebox version 2.0. For details, refer to Sony Walkman® Product Support on the Web at http://www.sony.com/walkmanproductsupport.

✍ (For Windows 2000 Professional models) Due to the incompatibility between Windows 2000 Professional software and NW-MS7 Portable Player hardware, connecting a NW-MS7 Portable Player to your VAIO notebook is not possible.

Smart Capture

Smart Capture is a Sony-designed application that manages the i.LINK®* connection between your computer and a compatible i.LINK digital camera or camcorder. You can capture and enhance video or still images to share with your family and friends over the Internet or through e-mail.

Smart Capture main window



* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary, depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or Hard Disk Drive, confirm their operating system compatibility and required operating conditions.

1	**Mode indicator** Displays the current mode (Still or Net Movie).	5	**Help button** Connects you directly to the online Smart Capture help.
2	**Mode dial** Switches Smart Capture from Still mode to Net Movie mode with a single click of your mouse.	6	**Capture button** Captures your individual still images in the same manner as a camera. You can select different characteristics for the Capture button when capturing a Net Movie.
3	**Options button** Displays the configuration options available for either Still or Net Movie mode.	7	**Application Switch drop-down list** Switches between the Still image and Net movie modes, using a drop-down list.
4	**Effects button** Displays the special effects that you can apply to your pictures or video clips.	8	**Image window** Displays the still or video image from your digital camera or camcorder.

Using Still mode

1 From the Start button, point to Programs, point to Smart Capture, and then click on Smart Capture. The Smart Capture main window appears.

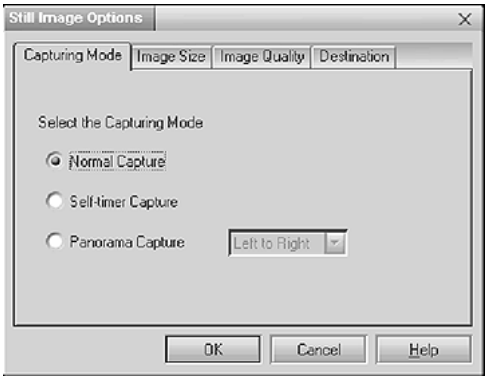
2 Connect your compatible i.LINK digital camera or camcorder to your computer with an i.LINK cable. An image appears in the Smart Capture main window.

✍ The Smart Capture main window opens with a blue screen image, indicating that there is no data input from a digital camera or camcorder. When you connect your digital camera or camcorder to your system with an i.LINK cable and turn it on, an image appears in the main window. Some cameras and camcorders need to have a recording media inserted before an image can be displayed in the Smart Capture window. Consult the manual that came with your digital camera or camcorder for more information.

3 Check that the Mode dial is set to Still. Click on the Mode dial to switch between Still mode and Net Movie mode.

4 Click on the Options button to view the available options for your still image capture. The Still Image Options window appears.

Still Image Options window

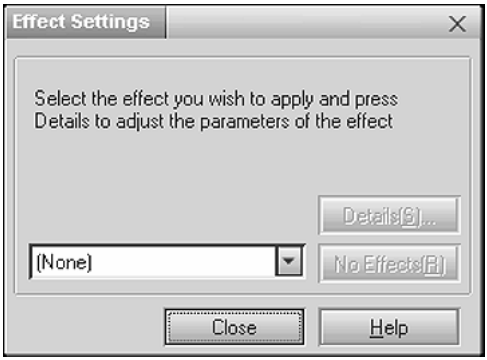


The Still Image Options window has four tabs:

- **Capturing Mode —** You can choose between Normal, Self-timer or Panorama Capture modes.
- **Image Size —** Select the image size, horizontal by vertical in pixels.
- **Image Quality —** Set the quality of your pictures as they are being saved by selecting Fine, Standard or Economy image quality.
- **Destination —** Select a file destination for your pictures.

5 Click on the Effects button to select a special image effect. The Effect Setting window appears. Use the drop-down list to view and customize the available effects.

Effect Setting window



✍ You can use a different special effect for each picture, or you can remove all special effects by clicking on the No Effects button.

Capturing a picture in Still mode

1 Use your digital camera or camcorder to locate the image you want to capture. When you see the desired image in the Smart Capture window, click

on the Capture button. The Still Viewer window appears. You can capture one picture or several pictures at a time.

Still Viewer window

2 Click on the arrows or drag the scroll bar to view the pictures. As each image is captured, it displays in the Still Viewer window with a balloon for your comments and an identifying number in the viewer's queue.

Managing pictures in Still mode

From the Still Viewer window, you can perform various functions using the task buttons:

- **Delete —** Discard any or all of your still images by clicking on the Delete button. Select a single image or all and the image(s) is "torn" and removed from the Still Viewer window.
- **Upload —** Send your still images online to the ImageStation Web site to share with your family and friends. ImageStation stores your still images online when you register for this free service. See, Using ImageStationSM.
- **Mail —** E-mail your still images to your family and friends. Click on the Mail button and your e-mail application launches with a new message window containing the still image.

- **Save —** Click on the Save button to save your still image in a variety of formats, to a location of your choice.

✍ You must be connected to the Internet before attempting to upload or e-mail your still images or videos.

Using Net Movie mode

1. From the Start button on the Windows taskbar, point to Programs, point to Smart Capture, and then click on Smart Capture. The Smart Capture main window appears.
2. Connect your compatible i.LINK digital camcorder to your computer with an i.LINK cable. An image appears in the Smart Capture main window.
3. Check that the Mode dial is set to Net Movie. Click on the Mode dial to switch between Still mode and Net Movie mode.
4. Click on the Options button to view the available options for your movie capture. The Recording Options window appears.

Recording Options window

The Recording Options window has three tabs:

- **Format —** You can adjust the compression rate for your movies in MPEG1 format or choose the AVI option for no compression. You can also set the maximum recording time for your movie capture.
- **Destination —** Select a file destination for your movies when recording video clips.
- **Capture Button —** Set the characteristics of the Capture button. You can start and stop recording by pressing the Capture button (this is the default characteristic). You can select Anti-Ground Shooting, which allows recording to occur only while the Capture button is pressed. Recording will stop when you release the button.

5 Click on the Effects button to select a special image effect. The Effect Setting window appears. Use the drop-down list to view and customize the available effects.

✍ You can remove all special effects by clicking on the No Effects button.

Capturing a movie in Net Movie mode

1 Use your digital camcorder to locate the view(s) you want to capture. When you see the desired view in either the Smart Capture window or your camcorder's viewfinder, press the Capture button to begin recording your movie. The Movie Player window appears.

2 Click on the Capture button when you have finished recording your movie and the first frame of your movie appears in the Movie Player window. You can record a movie for approximately 30 seconds. The Movie Player feature will automatically stop recording when this time limit is reached.

✍ If you have set the Capture button to use the Anti-Ground setting, you must press and hold the Capture button to continue recording.

Movie Player window

3 You can review your movie from the Movie Player window by using the play, pause and stop buttons. Click on the arrows or drag the scroll bar to view your movie. Each frame is displayed with an identifying number in the queue.

Managing your movie in Net Movie mode

From the Movie Player window, you can perform various functions using the task buttons:

- **Delete —** Discard any frame or the entire movie by clicking on the Delete button. The frame or movie is removed from the Movie Player window.
- **Upload —** Compress and send your movies online to the ImageStation Web site to share with your family and friends. ImageStation stores your movies online when you register for this free service. See Using ImageStationSM.

- **Mail —** E-mail your movies to family and friends. Click on the Mail button and your e-mail application launches with a new message window containing the movie.
- **Save —** Click on the Save button to compress and save your movie in a variety of formats, to a location of your choice.

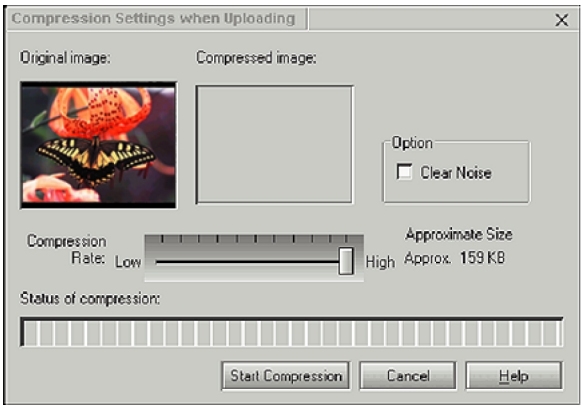
Using ImageStation℠

ImageStation is a free online service that allows you to store your pictures and movies on the Internet to share with family and friends. ImageStation requires an Internet connection and registration for the Web-based service. You must be connected to the Internet before uploading your pictures or movies with Smart Capture and ImageStation.

Uploading with Movie Player

1 Click on the Upload Button in Movie Player. The Compression Settings when Uploading window appears.

Compression Settings when Uploading window



2 Select the compression rate and press the Start Compression button. The ImageStation Login window appears. See steps 2 to 4 in the next section, Uploading with Still Viewer, for further uploading information.

✍ Sony recommends that your movie file size not exceed 254 MB if compressed, or 2 GB if not compressed. Large movie files take longer to upload to the ImageStation Web site.

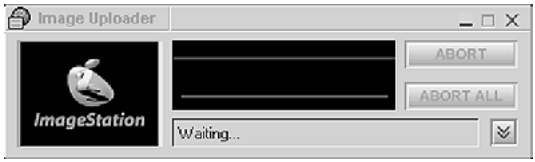
Uploading with Still Viewer

1 Click on the Upload button in Still Viewer. The ImageStation Login window appears.

ImageStation Login window

2 For first time users, the ImageStation registration wizard guides you through the initial registration process. Follow the onscreen instructions. If you are already a registered member, provide your login name and password. The Image Uploader window appears.

Image Uploader window



3 From the Still Viewer or Movie Player window, click on the Upload button to transfer your pictures or movies to the ImageStation Web site. The Image Uploader windows displays your Internet connection and upload status. Click on to see thumbnail previews of your pictures or movies.

✍ The ImageStation preview feature is available when you upload two or more pictures or a movie. No preview is shown if a single picture is being uploaded.

4 Go to http://www.imagestation.com to view your uploaded pictures or movies. Follow the onscreen instructions to access your ImageStation account. The ImageStation Web site may ask you to complete a full login again, if your current session is not active.

VisualFlow™

VisualFlow software is a Sony state-of-the-art multimedia browser designed specifically for Memory Stick media. It displays any still picture, movie or sound files stored in a Memory Stick media in a visually pleasing, artistic manner. VisualFlow software plays a selected movie or sound file, and enables playback of files by other applications such as PictureGear™, PictureToy™, Memory Stick Slideshow and Windows® Explorer.

To use VisualFlow

1 From the Start menu, point to Programs, point to VisualFlow, and then click on VisualFlow.

✍ If your system is compatible with Memory Stick media, the VAIO Action Setup may be configured to launch the VisualFlow browser upon insertion of a Memory Stick media. In this case, the VisualFlow application starts automatically when a Memory Stick media is inserted.

2 Click on an icon in the View section on the main toolbar to select a display layout.

3 Click on an icon in the Sort section on the main toolbar to select a sorting method.

4 Placing your cursor on the left end of the main toolbar activates the current Memory Stick properties.

5 Placing your cursor on the right end of the main toolbar activates a secondary toolbar with more functions.

6 Click on an image to show a normal view centered on the screen.

Double-clicking an image shows an enlarged view.

7 The movie file starts playback when the view is enlarged. Click again on the movie files to restore the view to normal.

✍ While an image is enlarged, the Launch toolbar appears at the bottom of the window. Any associated application can be activated from this point.

Using DVgate Software

In order to improve the performance of your notebook's DVgate™ motion software, the hard disk drive on your notebook has been formatted with two partitions, C and D. The C partition holds 40 percent, and the D partition holds 60 percent of the entire drive capacity. DVgate software saves files to the D partition. This prevents large video captures from consuming the available space on your C partition. To maintain optimum performance of DVgate software, you should defragment or format the D partition regularly.

To defragment a partition

⚠ **Before you defragment a partition, make sure you back up all files that you want to save.**

- Click the Start button in the Windows® taskbar.
- Click Programs, then Accessories, then System Tools, and then Disk Defragmenter. The Disk Defragmenter window appears.

Select the drive you want to defragment from the list, and click the Defragment button. See Windows® Help for more information on defragmenting.

DVgate plug-in for Adobe Premiere®

If your VAIO® Notebook does not come with Adobe Premiere pre-installed and you subsequently purchase that software, you must install a plug-in to enable DVgate™ 2.3 software.

Installing the DVgate plug-in

To install the plug-in for Adobe Premiere® 5.1 and 5.1LE, proceed as follows:

- Click Start in the Windows® taskbar and select Run.
- Click Browse and, from your C: drive, select Program Files, and Sony, and Dvgate, and Premiere Plug-in, and then 5.1.
- Select "Setup.exe" and click Open. Then click OK to install the plug-in.

To install the plug-in for Adobe Premiere® 6.0, proceed as follows:

- Click Start in the Windows® taskbar and select Run.
- Click Browse and, from your C: drive, select Program Files, and Sony, and Dvgate, and Premiere Plug-in, and then 6.0.
- Select "Setup.exe" and click Open. Then click OK to install the plug-in.

Application, Driver, and System Recovery CDs

Your notebook comes with the following application and system recovery CDs. (To use your recovery CDs, see "Using Your Recovery CDs" for more information.)

Application Recovery CD(s)

Sony Electronics Inc.

This CD enables you to reinstall individual applications if they become corrupted or erased.

Driver Recovery CD(s)

Sony Electronics Inc.

This CD enables you to reinstall individual device drivers if they become corrupted or erased.

System Recovery CD(s)

Sony Electronics Inc.

This CD enables you to format the C:\ partition of the hard disk drive, then reinstall the operating system and software titles that shipped with your notebook, if they become corrupted or are erased. Use it to restore the hard disk of the VAIO® Notebook you purchased. This CD restores your notebook to its original state, so user data and applications will be lost.

Using Your Recovery CDs

The following sections describe how to use the Application Recovery, Driver Recovery, and System Recovery utilities.

Using the Application Recovery CD(s)

The Application Recovery CD(s) allows you to reinstall individual applications if they become corrupted or are accidentally erased. Reinstalling an individual software title may correct a problem you are experiencing with your notebook or software application; you may not need to reinstall the entire contents of your hard drive. If you need to reinstall all the software titles that shipped with your notebook, use the System Recovery CD(s). See "Using the System Recovery CD(s)" for more information.

You can also use the Application Recovery CD to install Windows 2000 drivers on your notebook.

✍ You must be in Windows to run the Application Recovery CD. If you have any questions on using the Application Recovery CD, contact Sony Customer Support.

To use the Application Recovery CD(s)

1. Turn on your notebook. If your notebook is already on, close all applications.
2. When the Windows desktop appears, insert the Sony Application Recovery CD in the optical drive. The Application Recovery utility loads automatically.
3. When the Application Recovery menu appears, select the icon for the application you want to restore and then follow the on-screen instructions to complete the recovery process.

✍ Your system may include one or two Application Recovery CDs. If you have two Application Recovery CDs, insert the first CD to run the Application Recovery program. You may be prompted to insert the second CD, depending on the application you wish to restore.

Using the Driver Recovery CD(s)

The Driver Recovery CD utility enables you to reinstall individual drivers if they become corrupted or are accidentally erased. You can reinstall an individual driver to correct a problem that you are experiencing with your notebook, hardware, or software application. VAIO Support Agent uses a vault feature on the Driver Recovery CD(s) to repair software applications.

✍ You must be in Windows to run the Driver Recovery CD utility.

To use the Driver Recovery CD(s)

1. Turn on your notebook. If your notebook is already on, close all applications.
2. When the Windows desktop appears, insert the Driver Recovery CD in the optical drive. Use My Computer or Windows Explorer to view the contents of the Driver Recovery CD. Select the appropriate driver.

To repair software applications using VAIO Support Agent

The Driver Recovery CD utility has an information vault that contains the original characteristics for the preinstalled software applications that are protected by VAIO Support Agent.

Using the System Recovery CD(s)

⚠ **This CD restores your notebook to its original state, so user data and applications will be lost.**

You can use the System Recovery CD(s) to reinstall the operating system and software titles that shipped with your notebook if they become corrupted or erased. You may not need to reinstall the entire contents of your hard drive. If you experience a problem with your notebook, reinstalling an individual device driver or software title may correct the problem. Use the Application Recovery CD(s) to reinstall individual applications or use the Driver Recovery CD(s) to reinstall device drivers. See “Using the Application Recovery CD(s)” for more information.

The System Recovery CD contains a backup copy of all the software originally installed on your hard disk drive. **It can be used only to recover the hard disk of the notebook you purchased.**

The System Recovery utility gives you Full Restore with Format. That is, it formats the hard disk drive, then restores all the original software.

Full Restore with Format removes all the information on the hard disk drive. You will lose any software you have installed and any other files you have created since you started to use your notebook. This means you will have to reinstall any applications that were not included with the notebook when you purchased it. If you have any questions on using the System Recovery CD, contact Sony Customer Support.

To use the System Recovery CD(s)

1. Insert the Sony System Recovery CD in the optical drive.
2. Shut down your notebook as described in the "Shutting Down Your Notebook" section of your printed QuickStart.
3. Wait four seconds and turn on your notebook.
4. Click OK to signify you have read and accept the Microsoft End-User License Agreement.
5. When the System Recovery menu appears, follow the on-screen instructions to complete the recovery process.

If your notebook does not start from the Recovery CD

1. Press the power button and hold it for more than four seconds to turn off the notebook.
2. Turn on the notebook. When the Sony logo is displayed, press the F2 key. The BIOS setup menu screen appears.
3. Press the arrow keys to select the Exit menu.
4. Press the arrow keys to select "Get Default Values" and then press the Enter key. The message "Load default configuration now?" appears.
5. Check that "Yes" is selected, then press the Enter key.

6 Press the arrow keys to select “Exit” (Save Changes) and then press the Enter key. The message “Save configuration changes and exit now?” appears.

7 Check that “Yes” is selected, then press the Enter key. The notebook restarts from the Recovery CD.

✍ Your system may include one or two System Recovery CDs. If you have two System Recovery CDs, insert the first CD to run the System Recovery program. You are prompted to insert the second CD once the information from the first CD has been installed.

The recovery process takes from 30 minutes to 60 minutes to complete.

After recovering your system using the SRCD, you may be prompted to insert your ARCD after restarting Windows. Insert the ARCD to automatically complete recovery of your system.

Getting Help

Sony provides you with several support options to answer questions about your VAIO® Notebook or the preinstalled software. Refer to these resources in the order they are listed.

Support Options

1	**VAIO® Notebook User Guide and VAIO® Notebook Quick Start** The online VAIO® Notebook User Guide and printed VAIO® Notebook Quick Start provide you with information on how to maximize your notebook capabilities and solve common problems. To access the online user guide, click Start on the Windows® taskbar, select Help Center and VAIO Documentation. The quick start is supplied with your notebook.
2	**Manuals and Online Help Files** The software preinstalled on your notebook may come with an online manual. These manuals are stored on the hard disk drive as online help files. You can find the help files from the Help menu under specific software application. Some software applications may come with a printed manual.
3	**Operating System Online Support** Your notebook comes preinstalled with Microsoft® Windows®. For operating system support, you can access Microsoft® customer support at http://support.microsoft.com/directory/.
4	**VAIO Support Agent** You can find VAIO Support Agent from the Windows desktop. Using advanced diagnostic technology, Sony's VAIO Support Agent runs scheduled protections of your applications, network settings, and other important software settings. When your software is protected, you can use VAIO Support Agent to repair software problems by restoring your software to any of the previously protected states.

5	**Sony PC Support** This service provides you with instant access to information on commonly encountered problems. Enter a description of your problem and the Knowledge Database searches for the corresponding solutions online. You can access Sony PC Support at: http://www.sony.com/pcsupport.
6	**Sony Fax-on-Demand** This service, which requires a fax machine or your fax software, provides answers to commonly asked questions. You can use this automated service to request a list of available topics, then select the topics that you want to receive. To contact the Sony fax-on-demand service, call: 1-888-4SONYPC (1-888-476-6972).
7	**Sony Customer Support** Software support is available free of charge for 90 days after the original date of purchase. You can call and speak with a Sony Customer Support Representative without using your computer by calling: 1-888-4SONYPC (1-888-476-6972).

VAIO Support Agent

VAIO Support Agent helps you repair your own software problems without the assistance of a support analyst. VAIO Support Agent's advanced diagnostic technology identifies and tracks characteristics of your software applications and basic network settings. These diagnostics protect and store information in a retrievable format that enables you to restore your software to a previous working state. Sony has identified the software items that are protected by the VAIO Support Agent utility.

VAIO Support Agent has three features to help you fix your software problems: Quick Fix Wizard, Common Solutions, and Support Central. This section briefly describes these three features, and the automatic update capability of the VAIO Support Agent.

VAIO Support Agent main window

Using the Quick Fix Wizard

The VAIO Support Agent records and maintains a history of the VAIO Support Agent protected applications by taking a "snapshot" of the application at regular, timed intervals and storing it for future use. Should a problem develop with one of the protected applications, you can use the Quick Fix Wizard feature to retrieve the date/time (snapshot) that was recorded when the application worked correctly. The Quick Fix Wizard repairs the protected application files without altering the data files you have created using the application.

To use the Quick Fix Wizard, follow these steps:

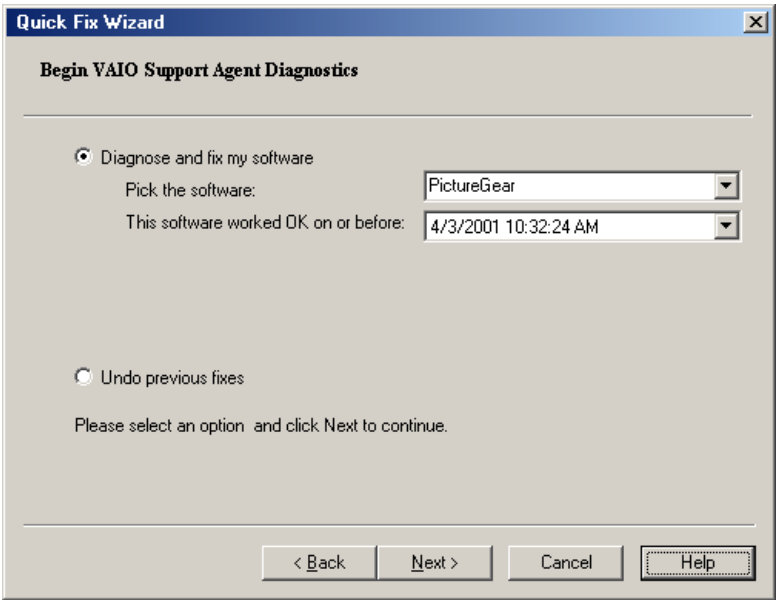
1. From the VAIO Support Agent main window, click the Quick Fix Wizard button. The Welcome window appears.
2. Click Next. The "Quick Fix Wizard: Begin VAIO Support Agent Diagnostics" dialog box appears.
3. Select the "Diagnose and fix my software" option.
4. Select the software you wish to repair from the drop-down list.

✍ To view a list of software applications protected by VAIO Support Agent, click on the "Pick the software:" drop-down list.

5 Next, select a date/time from the drop-down list that corresponds to the last time when the software worked properly.

6 Click Next to continue. Follow the instructions on the screen.

Quick Fix Wizard: Begin VAIO Support Agent Diagnostics dialog box



Using Common Solutions

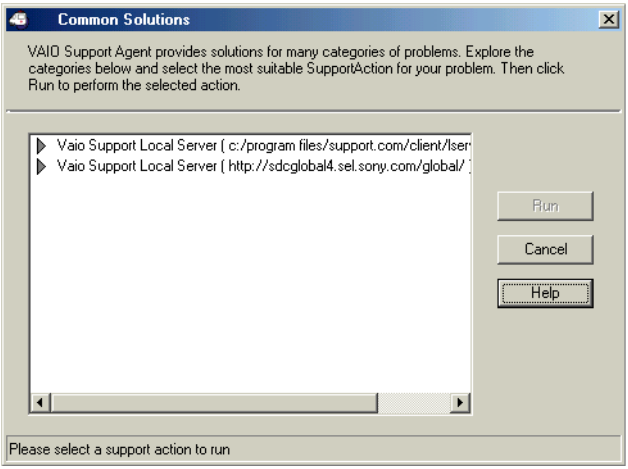
Common Solutions offers automated, One-Click Fixes to repair common software problems. These solutions can integrate information such as knowledge base articles and Frequently Asked Questions (FAQs). You can run One-Click Fixes directly from VAIO Support Agent or from a Web browser.

1 Click the Common Solutions button. The Common Solutions dialog box appears.

2 Double-click on the desired category to expand and view available SupportActions.

- VAIO Support Local Server (c:/program files/support.com...) provides a list of SupportActions available on your computer's hard disk drive.
- VAIO Support Local Server (http://sdcglobal4.sel.sony.com...) provides a list of SupportActions available from the Internet.

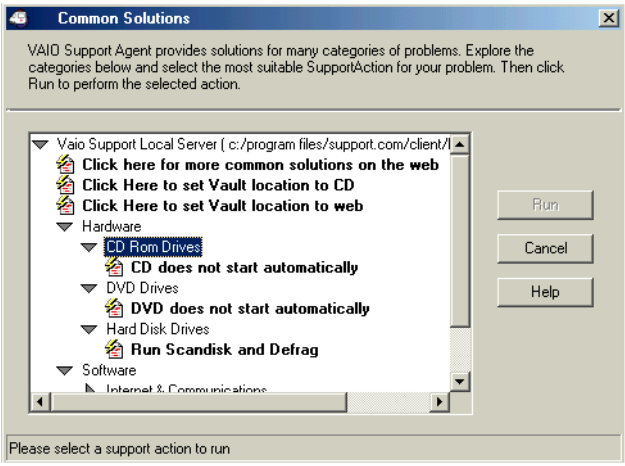
Common Solutions dialog box (1st level)


Common Solutions
VAIO Support Agent provides solutions for many categories of problems. Explore the categories below and select the most suitable SupportAction for your problem. Then click Run to perform the selected action.
Vaio Support Local Server [c:/program files/support.com/client/lser
Vaio Support Local Server [http://sdcglobal4.sel.sony.com/global/
Run
Cancel
Help
Please select a support action to run

✍ Connect to the Internet before attempting to view the category, "Vaio Support Local Server (http://sdcglobal4.sel.sony.com...)." This category is unavailable without an Internet connection.

3 Click the resize arrows next to the SupportAction categories to expand or collapse the categories.

Common Solutions dialog box (2nd level)


Common Solutions
VAIO Support Agent provides solutions for many categories of problems. Explore the categories below and select the most suitable SupportAction for your problem. Then click Run to perform the selected action.
Vaio Support Local Server (c:/program files/support.com/client/l
Click here for more common solutions on the web
Click Here to set Vault location to CD
Click Here to set Vault location to web
Hardware
CD Rom Drives
CD does not start automatically
DVD Drives
DVD does not start automatically
Hard Disk Drives
Run Scandisk and Defrag
Software
Run
Cancel
Help
Please select a support action to run

4 Select the appropriate SupportAction from the list.

5 Click Run or double-click the desired SupportAction. The available SupportActions are shown in bold type.

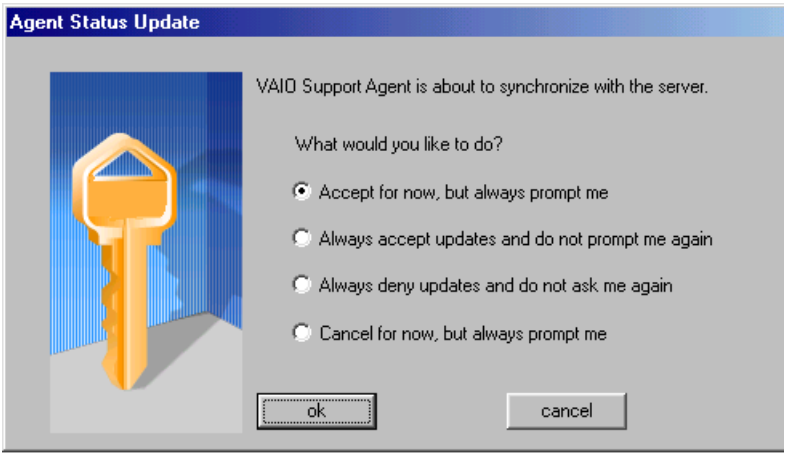
✍ You cannot undo One-Click Fixes.

Automatic Updates

The VAIO Support Agent is dormant as a background process. Every 24 hours, the Agent self-activates to contact the Sony Support Server to check for new updates or fixes needed for your system. This updating action only occurs while you are connected to the Internet and when more than 24 hours has passed since the last update.

Each time the VAIO Support Agent prepares to check for updates, the Agent Status Update dialog box appears and asks you to respond, unless you have previously selected the option, “Always accept updates and do not prompt me again.”

Agent Status Update


Agent Status Update
VAIO Support Agent is about to synchronize with the server.
What would you like to do?
Accept for now, but always prompt me
Always accept updates and do not prompt me again
Always deny updates and do not ask me again
Cancel for now, but always prompt me
ok
cancel

You can choose from four response options:

- Give the Agent your permission to contact the Sony Support Server for any updates or fixes that are available specifically for your computer. The Agent continues to prompt you for your permission to retrieve updates.
- Give the Agent your permission to contact the Sony Support Server for any updates or fixes that are available specifically for your computer. The Agent automatically retrieves updates without further prompting.
- Deny the Agent your permission to contact the Sony Support Server for any updates or fixes. The Agent discontinues any update retrieval and does not prompt again for your permission to update.
- Deny the Agent your permission to contact the Sony Support Server for the current update or fix. The Agent discontinues the current update retrieval, but prompts again for your permission for the next scheduled update.

Update Notification

Once you have granted permission for the system to check for updates or fixes, the Agent contacts the Sony Support Server. Available updates or fixes may be displayed to you in one of two ways. An update or fix may be displayed in a window with an explanation and instructions to follow. Others will cause the

ambulance icon on your task tray to blink. You should always check the ambulance icon in the task tray after the system checks for updates. If the icon is blinking, double-click the ambulance icon to view the update.

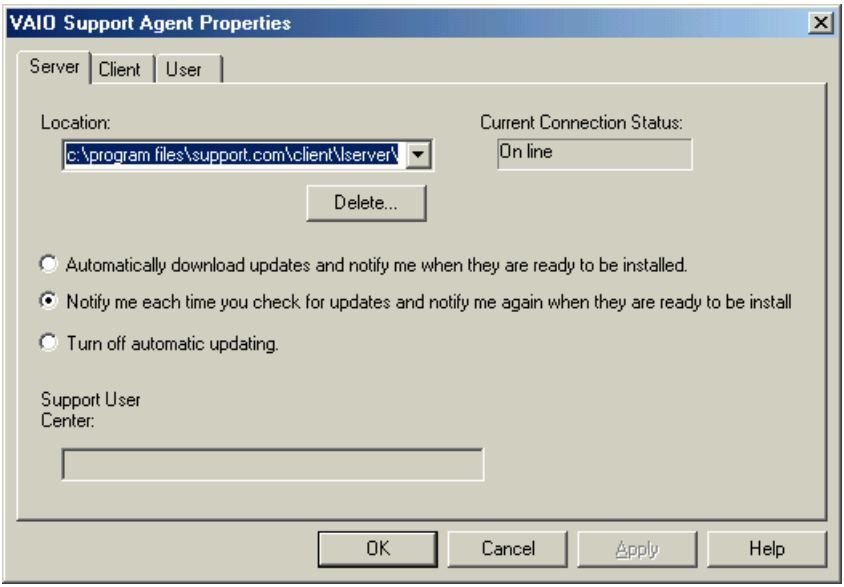
When clicking on the flashing ambulance icon, you must be connected to the Internet to receive an update.

VAIO Support Agent Properties

To control the VAIO Support Agent automatic update feature, follow these steps:

1. In the VAIO Support Agent main screen, select Tools, then select Properties. The VAIO Support Agent Properties dialog box appears.
2. Select one of three options to customize the automatic update feature.
3. Click OK.

VAIO Support Agent Properties window



Using Support Central

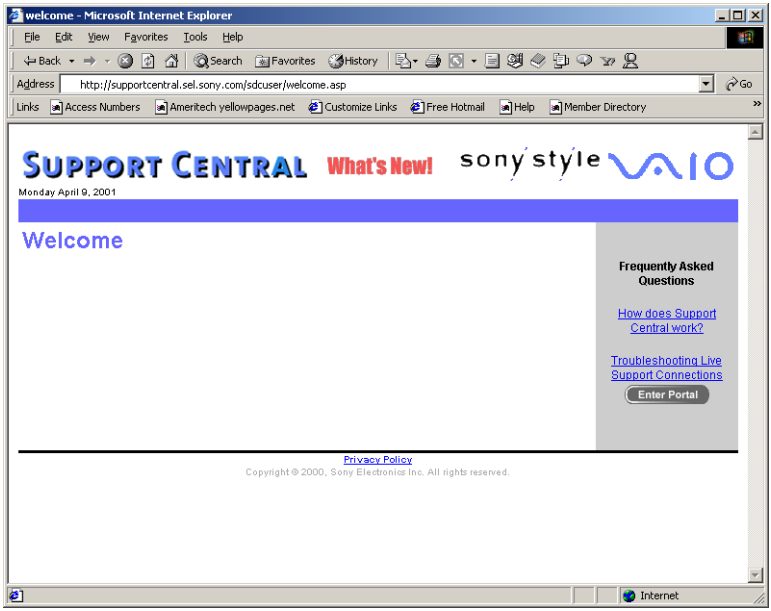
The Support Central feature uses Internet resources to help you fix your software. Support Central searches the Internet for answers to your questions, additional information from knowledge base systems, and the latest software updates for your protected software. Support Central also lets you contact live support agents for additional help.

1 Connect to the Internet.

2 From the VAIO Support Agent main window, click Support Central. The Support Central Welcome page appears.

✍ You must have Internet access to use Support Central.

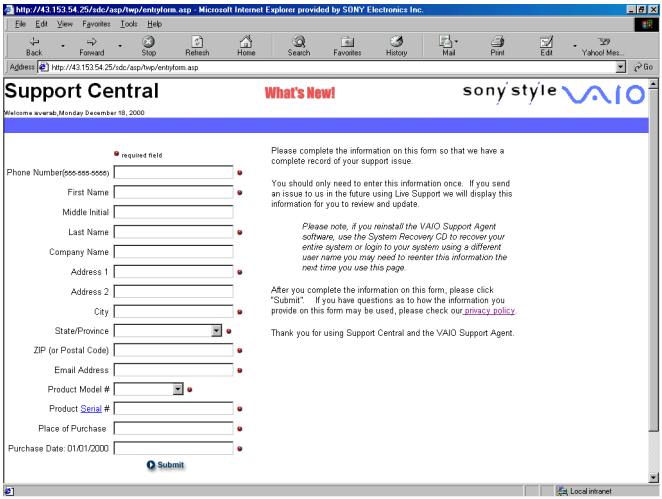
Support Central: Welcome page



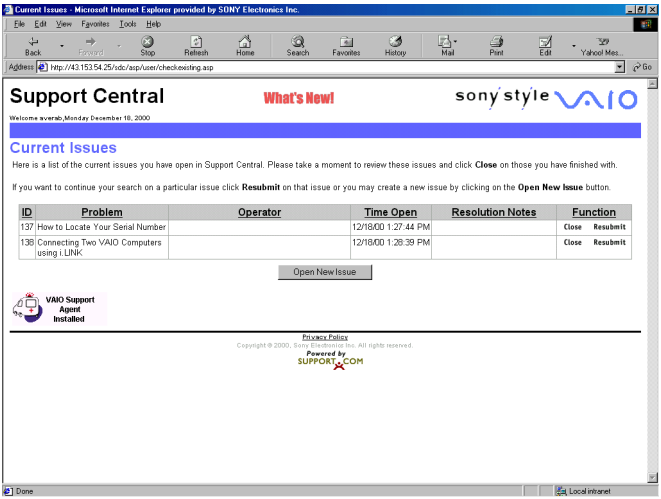
3 Click Enter Portal to begin using Support Central. First-time users will be asked to register with Support Central.

Support Central retains your registration information, so you are only required to register once. If you log on to your computer with a different user name or have recovered your system using the System Recovery CDs, Support Central may require you to register again.

Support Central: Registration page

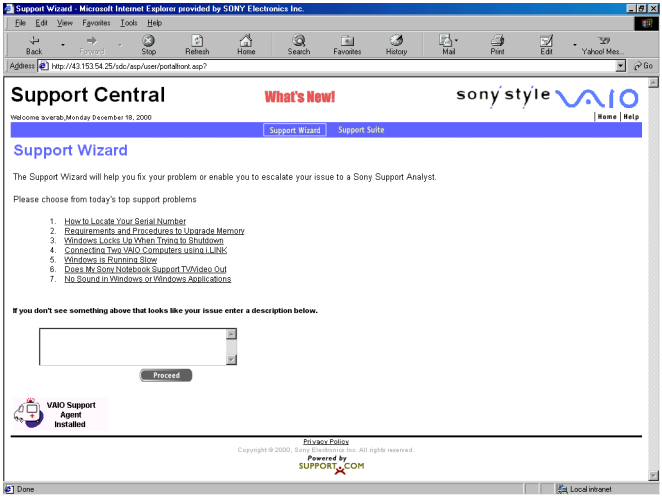

http://43.153.54.25/sdc/asp/hwp/entryform.asp - Microsoft Internet Explorer provided by SONY Electronics Inc.
Support Central
What's New!
sony style VAIO
Welcome sverab, Monday December 18, 2000
required field
Phone Number(555-555-5555)
First Name
Middle Initial
Last Name
Company Name
Address 1
Address 2
City
State/Province
ZIP (or Postal Code)
Email Address
Product Model #
Product Serial #
Place of Purchase
Purchase Date: 01/01/2000
Submit
Please complete the information on this form so that we have a complete record of your support issue.
You should only need to enter this information once. If you send an issue to us in the future using Live Support we will display this information for you to review and update.
Please note, if you reinstall the VAIO Support Agent software, use the System Recovery CD to recover your entire system or login to your system using a different user name you may need to reenter this information the next time you use this page.
After you complete the information on this form, please click "Submit". If you have questions as to how the information you provide on this form may be used, please check our privacy policy.
Thank you for using Support Central and the VAIO Support Agent.

Support Central: Current Issues page


Current Issues - Microsoft Internet Explorer provided by SONY Electronics Inc.
File Edit View Favorites Tools Help
Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Yahoo! Mes...
Address http://43.153.54.25/sdc/asp/user/checkexstng.asp
Go
Support Central
What's New!
sony style VAIO
Welcome nversb,Monday December 18, 2000
Current Issues
Here is a list of the current issues you have open in Support Central. Please take a moment to review these issues and click Close on those you have finished with.
If you want to continue your search on a particular issue click Resubmit on that issue or you may create a new issue by clicking on the Open New Issue button.
ID Problem Operator Time Open Resolution Notes Function
137 How to Locate Your Serial Number 12/18/00 1:27:44 PM Close Resubmit
138 Connecting Two VAIO Computers using i.LINK 12/18/00 1:28:39 PM Close Resubmit
Open New Issue
VAIO Support Agent Installed
Privacy Policy
Copyright © 2000, Sony Electronics Inc. All rights reserved.
Powered by SUPPORT.COM
Done
Local intranet

When you log on to Support Central, the Current Issues page displays, enabling you to continue working on your open issues or to close them if you are finished. Support Central has a tracking feature that stores your current issues, enabling you to return and work on them later.

Support Central: Support Wizard page


Support Wizard - Microsoft Internet Explorer provided by SONY Electronics Inc.
Support Central
What's New!
sony style VAIO
Support Wizard
Support Suite
Support Wizard
The Support Wizard will help you fix your problem or enable you to escalate your issue to a Sony Support Analyst.
Please choose from today's top support problems
1. How to Locate Your Serial Number
2. Requirements and Procedures to Upgrade Memory
3. Windows Locks Up When Trying to Shutdown
4. Connecting Two VAIO Computers using i.LINK
5. Windows is Running Slow
6. Does My Sony Notebook Support TV/Video Out
7. No Sound in Windows or Windows Applications
If you don't see something above that looks like your issue enter a description below.
Proceed
VAIO Support Agent Installed
Privacy Policy
Powered by SUPPORT.COM

If you log on to Support Central with a new issue, or if you do not have any open issues, the Support Wizard appears. You can begin searching on the new issues.

✍ You must be connected to the Internet to use Support Central.

Software Support Information

Adobe Acrobat® Reader, Adobe Photoshop Elements, Adobe Premiere® LE (Adobe Systems, Inc.)

Web site	http://www.adobe.com/
phone	206-675-6126 (fee-based support)
e-mail	techdocs@adobe.com
hours	M-F, 6 AM-5 PM PT

America Online® (America Online)

Web site	http://www.aol.com
phone	800-827-3338
hours	7 days a week, 8AM-2AM ET

Apple QuickTime (Apple Computer Inc.)

Web site	http://www.apple.com
phone	800-692-7753
hours	7 days a week, 24 hours a day

ArcSoft PhotoPrinter® 2000 Pro (ArcSoft Inc.)

Web site(s)	http://www.arcsoft.com http://www.photoisland.com
phone	510-440-9901
fax	510-440-1270
e-mail	techsupport@arcsoft.com
hours	M-F, 8:30 AM-5:30 PM PT

CompuServe® 2000 (CompuServe Interactive Services, Inc.)

Web site	http://www.compuserve.com
phone	800-848-8990

Easy CD Creator (Roxio, Inc.)

Web site(s)	http://www.roxio.com/en/support/
phone	408-934-7283
hours	M-F, 6 AM - 5 PM, PT

EarthLink Network TotalAccess® (EarthLink Network Inc.)

Web site	http://help.earthlink.net/techsupport/
phone	800-890-5128, 800-890-6356
e-mail	support@earthlink.net
hours	7 days a week, 24 hours a day

Netscape Communicator® (Netscape Communications Corp.)

Web site	http://www.netscape.com/
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-SONYPC is free of charge for 90 days after the original date of purchase.

Norton AntiVirus™ (Symantec Corporation)

Web site	http://www.symantec.com/techsupp/
phone	800-927-3991; 900-646-007*
hours	M-F, 6 AM - 5 PM PT

* Support from 800-927-3991 is fee-based per incident; support from 900-646-0007 is fee-based per minute. Online support is free of charge.

Prodigy Internet® (Prodigy Communications Corp.)

Web site	http://www.prodigy.com
phone	800-213-0992
hours	M-F, 7 AM-3 AM ET

RealJukebox, RealPlayer, RealProducer (Real Networks, Inc.)

Web site(s)	http://service.real.com/rjoptions.html http://service.real.com/help/call.html
phone	206-674-2680
fax	M-F, 8 AM-6 PM PT; Sat-Sun, 7:30 AM-4 PM PT

Sony Applications (Sony Electronics Inc.)

Web site	http://www.sony.com/pcsupport
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-SONYPC is free of charge for 90 days after the original date of purchase.

Sound Forge® XP (Sonic Foundry, Inc.)

Web site	http://www.sonicfoundry.com
phone	608-256-5555
fax	608-256-7300
e-mail	support@sonicfoundry.com
hours	M-F, 8 AM - 7 PM CT

Quicken® 2001 (Intuit Inc.)

Web site	http://www.intuit.com/support
phone	800-644-3193
hours	7 days a week, 24 hours a day

Windows® Millennium Edition or 2000 Professional Operating System, Internet Explorer, Word 2000 (Microsoft Corp.)

Web site	http://www.sony.com/pcsupport
phone	888-4SONYPC (888-476-6972)*
hours	7 days a week, 24 hours a day

* Support from 1-888-4SONYPC is free of charge for 90 days after the original date of purchase.

WinDVD (InterVideo, Inc.)

Web site	http://www.intervideo.com
phone	510-651-0888

Sony Service Center

For the Sony Service Center nearest you, call 1-888-4SONYPC (1-888-476-6972) or find Sony Customer Service on the Web at http://www.sony.com/pcsupport.

Troubleshooting

This section describes how to solve common problems you may encounter when using your notebook. Many problems have simple solutions, so try these suggestions before you contact Sony PC Support (http://www.sony.com/pcsupport).

Troubleshooting your notebook

(Windows Me only) When starting your notebook for the first time, the VAIO InitManager dialog box will appear. Please select "OK" to begin initial setup. If you do not execute the initial setup, you cannot use part of original VAIO hardware functions such as Power Management tool, scroll function of touchpad, and keyboard shortcut key function combined with the Fn key.

My notebook does not start.

- Check that the notebook is plugged into a power source and that it is turned on. Check that the power indicator on the front panel of the notebook indicates that the power is on.
- Check that the battery packs are inserted properly and that they are charged.
- Make sure there is no floppy disk in the floppy disk drive.
- Confirm that the power cord and all cables are connected firmly, as described in the "Connecting a Power Source" section of your printed QuickStart.
- If you plugged the notebook into a power strip or uninterruptible power supply (UPS), make sure the power strip or UPS is turned on and working.
- If you are using an external display, check that it is plugged into a power source and turned on. Check that the brightness and contrast controls are adjusted correctly. See the manual that came with your display for details.
- Condensation may cause the notebook to malfunction. If this occurs, do not use the notebook for at least one hour.
- Take the battery pack off the notebook, unplug the power cord and plug it in again, then turn on the power.

My notebook starts, but a BIOS error is displayed.

- When the internal backup battery is low on power, it may not start your system properly. The message "Press <F1> to resume, <F2> to setup" appears at the bottom of the screen. Follow these steps:

  1 Press F2. The BIOS Setup menu appears.

  2 Set the date (month/day/year). Press Enter.

  3 Press ↓ to select System Time, then set the time (hour: minute: second). Press Enter.

  4 Press → to select Exit, then press ↓ to select Get Default Values. The message "Load default configuration now?" appears.

  5 Select Yes and press Enter.

  6 Select Exit (Save Changes), and then press Enter. The message "Save Configuration changes and exit now?" appears.

  7 Select Yes, and then press Enter. The notebook restarts.

My notebook starts, but the message "Operating system not found" appears and Windows does not start.

- Make sure there is no floppy disk in the floppy disk drive (non-bootable).
- If a non-bootable floppy disk is in the drive, follow these steps:

  1 Turn off the notebook, and then remove the floppy disk.

  2 Restart the notebook and confirm that Windows starts properly.

- If Windows still does not start, follow the steps below to initialize the BIOS:

Remove any floppy disk from the floppy disk drive.

  3 Turn off the notebook.

  4 Remove any peripheral devices connected to the notebook.

  5 Turn the notebook back on.

  6 Press the F2 key when the Sony logo appears. The BIOS setup menu screen appears.

  7 Press the directional arrow keys to select the Exit menu.

  8 Press the arrow keys to select "Get Default Values" and then press Enter. The message "Load default configuration now?" appears.

9 Select Yes, then press Enter.

10 Use the directional arrow keys to select “Exit” (Save Changes), and then press Enter. The message “Save configuration changes and exit now?” appears.

11 Select Yes, then press Enter. The notebook restarts.

If your notebook continues to display the message “Operating system not found,” and Windows does not start, use your supplied System Recovery CD to restore the operating system and software titles shipped with your notebook. See “Using the System Recovery CD(s)” for more information.

The System Recovery CD restores your notebook to its original state, so user data and applications will be lost.

My notebook stops responding or does not shut down.

It is best to shut down your notebook using the Shut Down command on the Windows Start menu. Using other methods, including those listed here, may result in loss of unsaved data.

- Try restarting the notebook. On the Windows taskbar, click the Start button, click Shut Down, and then click Restart.
- (Windows Me) If you cannot restart as described in the preceding step, you can restart the notebook by pressing Ctrl+Alt+Delete simultaneously twice.
  (Windows 2000) If you cannot restart as described in the preceding step, you can restart the notebook by pressing Ctrl+Alt+Delete simultaneously and clicking Shut Down on the Windows Security screen.
- If the previous step does not work, press and hold the power button for at least four seconds. This turns off the power.
- (Windows Me) If your notebook stops responding while playing a CD or DVD, stop the CD/DVD, and restart the notebook by pressing Ctrl+Alt+Delete simultaneously twice.
  (Windows 2000) If your notebook stops responding while playing a CD or DVD, stop the CD/DVD, and restart the notebook by pressing Ctrl+Alt+Delete simultaneously and clicking Shut Down on the Windows Security screen.
- Unplug the notebook from the AC adapter and remove the battery pack from your notebook.

✍ Pressing Ctrl+Alt+Delete simultaneously or turning off the notebook with the power switch may result in data loss in files that are currently open.

My notebook does not enter the power saving mode I selected. (Windows Me only)

- Click Start, point to Program, point to Accessories, point to System Tools, and then click System Information.

  The Help and Support window appears.
- Click System Configuration Utility under the Tools menu.
- Click the Advanced button on the General tab, and Confirm the following information:

  1 Enable Deep Sleep is selected with a checkmark.

  2 The message “Standby function is enabled” is displayed. If the message reads “Standby function is disabled,” click the Enable button.

  3 The message “Hibernate feature is enabled” is displayed. If the message reads “Hibernate feature is disabled,” click the Enable button.

  4 Click OK and restart your notebook.

The Power Management setting is not responding.

Your notebook’s operating system may become unstable if it is interrupted or if you attempt to make changes before the notebook completely enters a lower power state, such as Hibernate.

- To restore the notebook to its normal operating stability:

  1 Close all open applications.

  2 Restart the notebook by pressing Ctrl+Alt+Delete simultaneously and selecting Restart from the drop-down list.

✍ If this procedure does not work, press and hold the power button for four seconds or longer to shut down the notebook.

The sound of my notebook's fan is too loud.

Use the PowerPanel utility to change the Thermal Control Strategy setting to Quiet. This setting slows down the CPU speed. See PowerPanel Help for more information.

Troubleshooting the LCD screen

My LCD screen is blank.

- Check that the notebook is plugged into a power source and that it is turned on.
- Check that the power indicator on the notebook is on.
- Check that the battery pack is inserted properly and charged.
- The notebook may be in LCD (Video) Standby mode. Press any key to activate the screen.
- The display mode may be set to external display mode. Press and hold the Fn key while pressing F7 several times.

My LCD screen continues to show the previous screen.

Press the Windows key and D key twice to refresh the screen.

The image on my connected external display is not centered or sized properly.

Use the controls on your external display to adjust the image. See the manual that accompanied your display for more information.

I want to change the video resolution of my display.

Follow this procedure to change the video resolution of your display.

- Click Start, point to Settings, point to Control Panel, and then click the Display icon.

  The Display Properties dialog box appears.
- Click on the Settings tab.
- Move the Screen Area slider to change your video resolution.

I cannot switch the LCD display to TV, and vice versa.

- Ensure that the TV was connected, configured, and powered on correctly prior to starting the notebook. See “Connecting a TV Display” for more information.
- Remove the DVD video disc if it is inserted in the optical drive.

Troubleshooting the mouse and touchpad

My mouse does not work.

- If you are using an external mouse, check that the mouse is plugged into the mouse port. See “Connecting an External Mouse or Keyboard” for more information.
- If you are using an optional Sony USB mouse PCGA-UMS1 series, check that the mouse is plugged into the USB port.
- If you are still experiencing problems, use your supplied Application Recovery CD(s) to reinstall the mouse drivers. See “Using Your Recovery CDs” for more information.

My touchpad does not work properly.

- You may have disabled the touchpad without a mouse being connected to the notebook. To enable the touchpad:
  1. Press the Windows key and use the arrow keys to select Programs, and then Sony Notebook Setup.
  2. Select the Touchpad tab using the arrow keys.
  3. Select Enable Touchpad, and then press Enter.
- You must restart the notebook to make the touchpad work again.
- If your touchpad is interpreting a single tap as a double-click, you must adjust the button assignments. Follow these steps:
  1. Press the Windows key and use the arrow keys to select Control Panel, and then Mouse.
  2. Change the button assignments in the Mouse Properties dialog box. (One of the buttons is assigned to the double-click action.)

- If this procuedure does not work, ensure that another mouse was not installed.
- You may need to use your supplied Driver Recovery CD(s) to reinstall the mouse drivers. See "Using the Driver Recovery CD(s)" for more information.

The pointer does not move while I am using the Touchpad or Mouse.

- Click the Start button on the Windows taskbar, and select Shut Down to display the Shut Down Windows dialog box, then press Enter.
- (Windows Me) If you cannot turn off your notebook as described in the step above, press Ctrl+Alt+Delete simultaneously to restart the notebook. (Windows 2000) If you cannot turn off your notebook as described in the step above, press Ctrl+Alt+Delete simultaneously and click Shut Down on the Windows® Security screen to restart the notebook.
- If you cannot restart your notebook as described in the step above, press and hold the power button for more than four seconds to turn off the notebook.
- If the pointer does not move while playing a disc, press Ctrl+Alt+Delete simultaneously to stop playback and restart the notebook.
- If this procedure does not work, ensure that another mouse was not installed.
- You may need to use your supplied Driver Recovery CD(s) to reinstall the touchpad drivers. See "Using the Driver Recovery CD(s)" for more information.

Troubleshooting drives, PC Cards and peripheral devices

My floppy disk drive cannot write to a floppy disk.

- Check that the floppy disk drive is properly inserted into the multipurpose bay. See "Using the Floppy Disk Drive" for more information.
- Check that a formatted floppy disk is properly inserted into the floppy disk drive.
- If the floppy disk is write-protected, disable the write-protect feature or use a floppy disk that is not write-protected.

My optical drive is not playing my CD or DVD properly.

- Make sure the label of the disc is facing up.

- If the disc requires software, make sure the software is installed according to the manufacturer's instructions.
- A dirty or damaged disc may cause the notebook to stop responding while it tries to read the disc. If necessary, restart the notebook, remove the disc, and then check it for dirt or damage.
- If you see video but can not hear audio, check all of the following:
  - Check that your optical drive does not have the mute setting enabled.
  - Check the volume setting in the audio mixer.
  - If you are using external speakers, check the volume settings, and then check the connections between your external speakers and the notebook.
  - Click Start, then Control Panel, then System, and then Device Manager. Check that the correct drivers are installed properly.
- Do not use adhesive labels to identify the CD. The label may come off while the disc is in use in the optical drive and cause the drive to malfunction.
- If a region code warning appears when you try to use your optical drive, it may be that the DVD you are trying to play is incompatible with the optical drive. Check the region code listing on the DVD packaging.
- Condensation may cause the notebook to malfunction. If this occurs, do not use it for at least one hour.

My optical drive tray does not open.

- Make sure the notebook is turned on.
- Press the Eject button on the optical drive.
- If the Eject button does not work, open the tray by inserting a sharp, pointed object (such as a paper clip) in the hole to the right of the Eject button.

I cannot use Digital Video (DV) devices. The message "DV equipment seems to be disconnected or turned off" appears.

- Check that the DV device is turned on and that the cables are properly connected.
- If you are using multiple i.LINK®* devices, the combination of the connected devices may cause unstable operation. In this case, turn off your notebook and all connected devices. Disconnect the devices that are not in use. Check the connections for each device, then restart your notebook.

My PC Card is not working.

- Make sure the PC Card is installed properly.
- Make sure the PC Card is compatible with Microsoft® Windows®.
- Use the Sony Notebook Setup utility to disable devices you are not currently using.
- If you are using two PC Cards, use the Sony Notebook Setup utility to disable the devices you are not currently using.
- Make sure any necessary drivers were installed properly. See "Using Your Recovery CDs" for more information on using the drivers.

Troubleshooting software

My software program stops responding or crashes.

Contact the software publisher or designated provider for technical support. See "Software Support Information" for more information.

When I click an application icon, the message "You must insert the application CD into your optical drive" appears and the software does not start.

- Some titles require specific files that are located on the application CD. Insert the disc and try starting the program again.
- Make sure you place the CD in the tray with the label side facing up.

I cannot use the DVgate software.

If your notebook is using the Ultimate Battery Life profile for its power saving mode, you cannot use DVgate or Smart Connect software. Please select another profile. Preferably, connect your notebook to AC power when using these features.

* i.LINK is a Sony trademark used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

Troubleshooting the modem

My modem does not work.

- Check that the phone line is plugged into the line jack. See “Connecting a Phone Line” for more information.
- Check that the phone line is working. You can check the line by plugging in an ordinary phone and listening for a dial tone.
- Check that the phone number the program is dialing is correct.
- Check that the software you are using is compatible with the notebook’s modem. (All preinstalled Sony programs are compatible.)
- If you are still experiencing problems, use your supplied Driver Recovery CD(s) to reinstall the modem drivers. See “Using the Driver Recovery CD(s)” for more information.

My modem connection is slow.

Your notebook is equipped with a V.90/K56flex-compatible modem. Many factors may influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet Service Provider (ISP), check the following:

- Have your phone company check that your phone line is free from any line noise.
- If your problem is fax-related, check that there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- If you are having a problem connecting with your Internet Service Provider, check that the ISP is not experiencing technical problems.
- If you have a second phone line available, try connecting the modem to that line.

Troubleshooting audio

My speakers make no sound.

- If the built-in speakers are turned off, press Fn+F3 to turn on the speakers. You can also turn on the speakers using the Jog Dial control.

- If the speaker volume is turned to the minimum, press Fn+F4, and then press ↓ or → to increase the volume or you can use the Jog Dial control to control the volume.
- If nothing is displayed when you press Fn+F3 or Fn+F4.

  1 Double click System in Control Panel.

  2 Set the sound device to enable in Device Manager.
- If your notebook is powered by batteries, check that the battery packs are inserted properly and that they are charged.
- If you are using an application that has its own volume control, check that the volume is turned up.
- Check the volume controls in the Windows® taskbar.
- If you connect external speakers, check that the speakers are properly connected and the volume is turned up. If the speakers have a mute button, make sure it is off. If the speakers are powered by batteries, check that the batteries are inserted properly and that they are charged.
- If you have connected an audio cable to the Headphone jack, disconnect the cable.
- If you are still experiencing problems, use the supplied Driver Recovery CD(s) to reinstall the drivers. See "Using the Driver Recovery CD(s)" for more information.

My microphone does not work.

If you are using an external microphone, check that the microphone is plugged into the Microphone jack. See "Connecting an External Microphone" for more information.

Troubleshooting the printer

I cannot print.

- The default setting for the printer port mode is correct for most printers. If you cannot print, try changing the printer port mode. In Sony Notebook Setup, select the Printer tab. If the printer port mode is set to ECP, change it to bi-directional. If the printer port mode is set to bi-directional, change it to ECP. See "Displaying the Sony Notebook Setup Screen" for details on using Sony Notebook Setup.

- Your connected printer may not function after the notebook resumes from a power saving mode. If this occurs, follow these steps to reset the printer connection:
- Windows Me Only
  - Right-click My Computer icon on the desktop, then select Properties.
  - Click the Device Manager tab.
  - Select Refresh, then click OK. The printer should function properly.
- Windows 2000 Only
  - Double-click My Computer icon on the desktop, then double-click on the Control Panel folder.
  - Double-click on the Printers folder.
  - Right-click on the icon of the printer that is not functioning, and select Properties to access the Properties window.
  - Click OK to close the Properties window. The printer should function properly.

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